Metals In The Environment
Geological Survey of Canada

ENVIRONMENTAL GEOCHEMISTRY OF THE KAMINAK LAKE AREA, KIVALLIQ REGION, NUNAVUT

Geological Survey of Canada Open File 4089
October 2001

I. McMARTIN, G.E.M. HALL, J.A. KERSWILL,
S. DOUMA, S.P. GOFF, A.L. SANGSTER and J.E. VAIVE

Contribution to the GSC - MITE PROGRAM
PROJECT 2.1c

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GEOLOGICAL SURVEY OF CANADA

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I. McMartin, G.E.M. Hall, J.A. Kerswill, S. Douma, S.P. Goff,
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2001

Cover illustration

Mudboil sampling in sulphide-rich till along Transect 2 in the NE part of Kaminak Lake.

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Report text and figures are available as PDF digital files, Appendices I-XXII as digital data files in EXCEL format, and Appendix XXIII in a variety of digital formats. All digital files are available from the GSC Bookstore, 601 Booth Street, Ottawa, Ontario, K1A 0E8, (613) 995-4342, Internet: http://www.nrcan.gc.ca/gsc/bookstore/index_e.html.

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5) Bedrock geology map of the Carr-Kaminak-Quartzite lakes area (from Irwin et al., 1998)

INTRODUCTION

In 1997, the Geological Survey of Canada initiated the five year Metals in the Environment Program (MITE) to address scientific issues related to natural and anthropogenic signatures of metals in the surface environment. The Kaminak Lake project (2.1c) was carried out in the Kivalliq Region of Nunavut to study the cycling of mercury (Hg) in soils underlain by permafrost (McMartin et al., 1999, 2000a, 2000b). The work was part of a larger project (2.1) designed to examine weathering processes and trace metal flux in the surficial environment at sites located in different ecozones and geological terrains across Canada. The purpose of this Open File publication is to release the complete datasets collected as part of the Kaminak Lake project by the Geological Survey of Canada in 1997 and 1999. Data interpretation will be presented in future publications, specifically regarding the role of organic matter and the importance of cryoturbation processes in mineral soils of cold climate for the transport of Hg and other metals to lacustrine environments.

Background

In 1971, a commercial fishery was established in the NW part of Kaminak Lake to supply a local processing plant in Rankin Inlet. Because Hg levels in fish were of general concern, Hg was monitored by the Freshwater Institute in Winnipeg (Department of Fisheries and Oceans - DFO). Results showed high Hg concentrations in lake trout (*Salvelinus namaycush*), ranging from 0.57 to 2 ppm (Sherbin, 1979), therefore exceeding the national consumption guideline of 0.5 ppm (mg kg^{-1}). As a result, the fishery was abandoned in 1972 and relocated on nearby Kaminuriak Lake where Hg levels in fish appeared to be acceptable (0.18 to 0.94 ppm). Recent Hg analysis of Kaminak lake trout collected in 1995-96 has confirmed the 1970's data indicating relatively high Hg concentrations, ranging from 0.60 to 1.42 ppm (L. Lockart, DFO, pers. com. 2000). Furthermore, analysis of surface lake water sampled in 1970 by the GSC showed Hg concentrations above background in the northern part of Kaminak Lake (Fig. 1), specifically in areas underlain by Archean greenstone belt rocks and/or by Proterozoic sedimentary rocks (Hornbrook and Jonasson, 1971). Variations in Hg concentrations in lake water were therefore assumed to be related to the local presence of slates (Ameto Fm - Hurwitz Group) in the Proterozoic belt and/or to country rocks and sulphide mineralization in the Archean greenstone belt (Hornbrook and Jonasson, 1971). Shilts and Coker (1995) republished the reconnaissance lake water data of Hornbrook and Jonasson together with unpublished results from further detailed sampling undertaken in 1971 (Fig. 2). These authors postulated that the high Hg levels in Kaminak Lake fish were the result of local

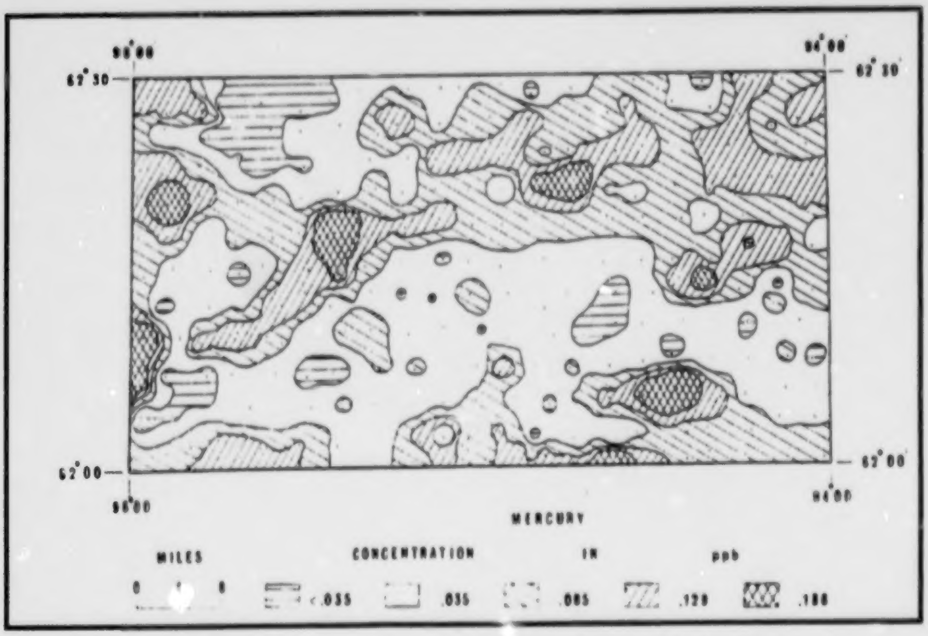


Figure 1. Regional lake water Hg anomaly map for the Kaminak Lake area (from Hornbrook and Jonasson, 1971). Kaminak Lake is located in the center of this map (see Fig. 2).

weathering of bedrock and overlying glacial sediments, ultimately creating bio-available Hg species in the lake for the fish to accumulate. Hg enrichments in both lake fish and water were therefore considered as a classic example of "natural" contamination by Hg in a remote, unpopulated region of Canada (Shilts and Coker, 1995).

The principal objectives of the Kaminak Lake project are to:

- determine the source(s) and occurrence of Hg in local bedrock and mineralization,
- evaluate the distribution of Hg in the surficial environment,
- examine the residence sites of Hg in soils underlain by permafrost, and
- determine the factors which control the observed concentrations of Hg in soils and the pathways through which Hg may become bio-available to the fish.

Organization of report

This report first presents a regional physiographic and geological setting for the study area followed by a detailed description of all field and laboratory methods used during the Kaminak Lake project. The Appendices I to XXII include an extensive environmental database regarding the

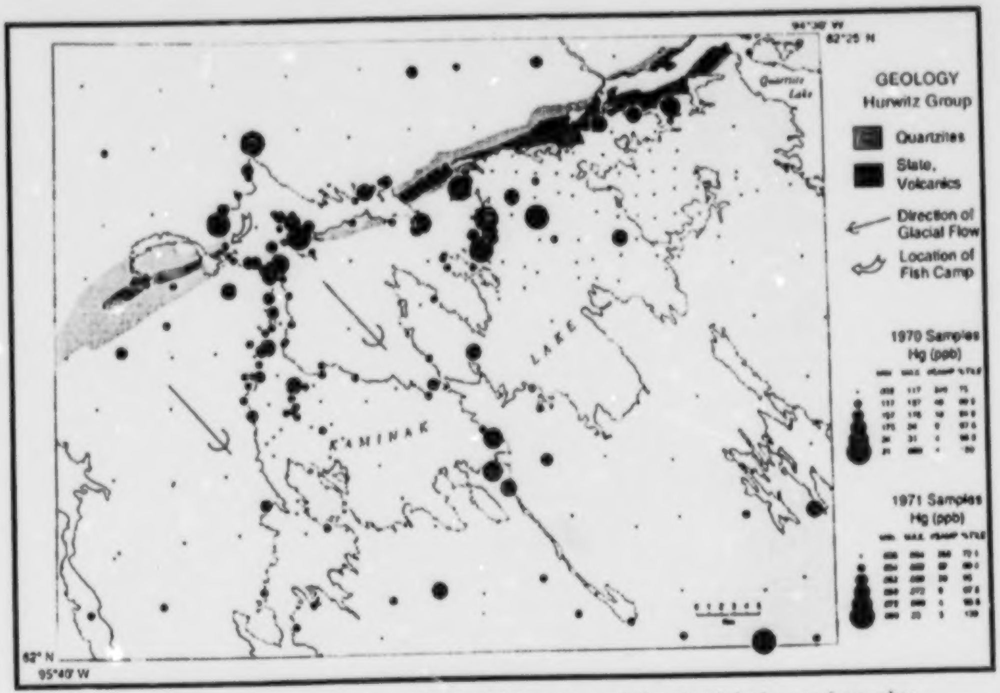

94°30' W
62°25' N
Quartzite Lake
GEOLOGY
Hurwitz Group
Quartzites
Slate, Volcanics
Direction of Glacial Flow
Location of Fish Camp
1970 Samples Hg (ppb)
1971 Samples Hg (ppb)
KAMINAK
LAKE
62° N
95°40' W

Figure 2. Concentrations of Hg (ppb) in water of Kaminak Lake and nearby lakes (from Shilts and Coker, 1995).

composition of glacial sediments (e.g. till), humus, dwarf birch leaves, peat, lake water and bedrock samples collected in 1997 and 1999 by the Geological Survey of Canada across the Kaminak Lake drainage basin. Field site and sample descriptions as well as data on erosional ice flow indicators are included in the Appendices. Lithogeochemical data from bedrock samples collected at known mineral deposits/showings in 1997, and a summary of the results from the SEM examination of the most Hg-rich bedrock samples are also presented. Finally, previously published datasets available for the Kaminak Lake area are presented in Appendix XXIII. They include a listing of all significant mineral occurrences (from Goff and Mills, 1998), regional till geochemistry data (from Shilts and Wyatt, 1989), available Hg data for Kaminak Lake fish (from Sherbin, 1979 and L. Lockart, DFO, per. com.), a digital compilation of the existing surficial geology map (from Arsenault et al., 1981, 1982), and the most recent bedrock map compiled as part of the Western Churchill NATMAP Project (Irwin et al., 1998).

REGIONAL SETTING

Location and physiography of lake basin

Kaminak Lake is located in a remote, unpopulated area of the Kivalliq Region in Nunavut,

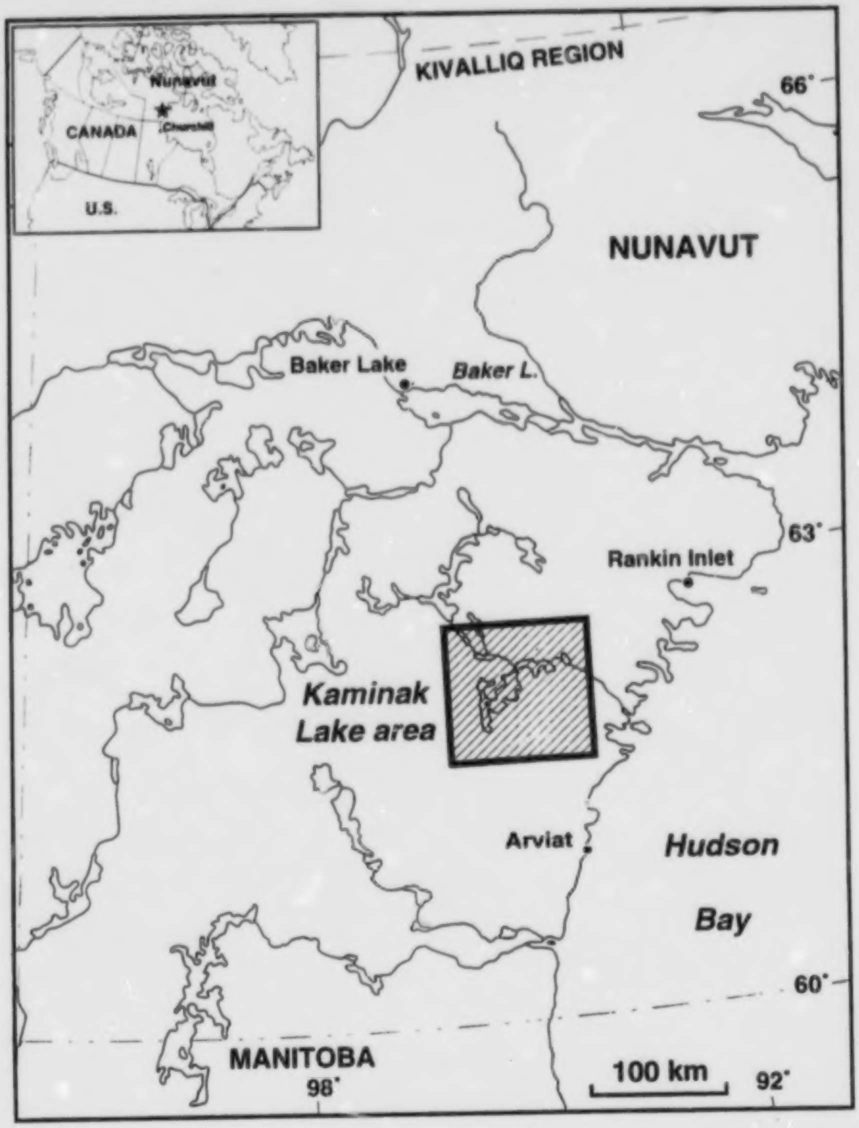

Nunavut
CANADA
Churchill
U.S.
KIVALLIQ REGION
66°
NUNAVUT
Baker Lake
Baker L.
63°
Rankin Inlet
Kaminak
Lake area
Arviat
Hudson
Bay
60°
MANITOBA
98°
100 km
92°

Figure 3. Location map of study area in the Kivalliq Region of Nunavut.

about 100 km west of Hudson Bay, and 375 km north of Churchill, Manitoba (Fig. 3). The drainage basin is approximately bounded by latitudes 61°45' and 62°35' N and longitudes 94° and 96° W and lies within the Kaminak segment of the Henik-Kaminak-Tavani greenstone belt (Hanmer et al., in press), 150 km north of the treeline (Fig. 4). It spans the northernmost part of 1:250 000 scale National Topographic Series map 55 E (Eskimo Point) and the southern half of 55 L (Kaminak Lake). Kaminak Lake is a large, shallow (mainly <10 m deep), irregular lake with many bays. It covers approximately 521 km^2, or about 14.5% of the watershed area (3,595 km^2). Its surface is 53 m above modern sea level. The physiography of the drainage basin is characterized by a low relief, broad, low hills, and numerous northwest to southeast oriented lakes (Fig. 4). The lake itself empties into Quartzite Lake which is a continuation and enlargement of the Ferguson River that flows into Hudson Bay, about 80 km downstream (Figs. 3 & 4). Table 1 summarizes the physical characteristics of the lake basin.

Table 1. Physical characteristics of Kaminak Lake drainage basin.

Lake area	521 km^2
Drainage basin area	3595 km^2
Surface water area	1037 km^2
"Shallow peatland" area	407 km^2
Surface water and peatland area	1444 km^2

Kaminak Lake drainage basin is underlain by continuous permafrost with the depth of the active layer (depth to permafrost table) varying from 15 to 200 cm. The vegetation is open tundra type, characterized by the presence of dwarf trees, shrubs, sedges and grasses. The area experiences a continental arctic to sub-arctic climate, with mean monthly temperatures ranging from -30° to + 15°C. The waters of Kaminak and all other lakes in the region are highly oxygenated with near neutral pH and very low conductivities (Klassen et al., 1975; Shilts et al., 1976).

Regional geology

Precambrian

The Kivalliq Region is underlain principally by Precambrian rocks of the Western Churchill Province of the Canadian Shield. The geology of the Kaminak basin is complex (Fig. 5), consisting of the Neoarchean Kaminak segment of the Henik-Kaminak-Tavani greenstone belt (Hanmer et al., in press), mainly sulphide-bearing metavolcanic rocks (Kaminak Group - Davidson, 1970),

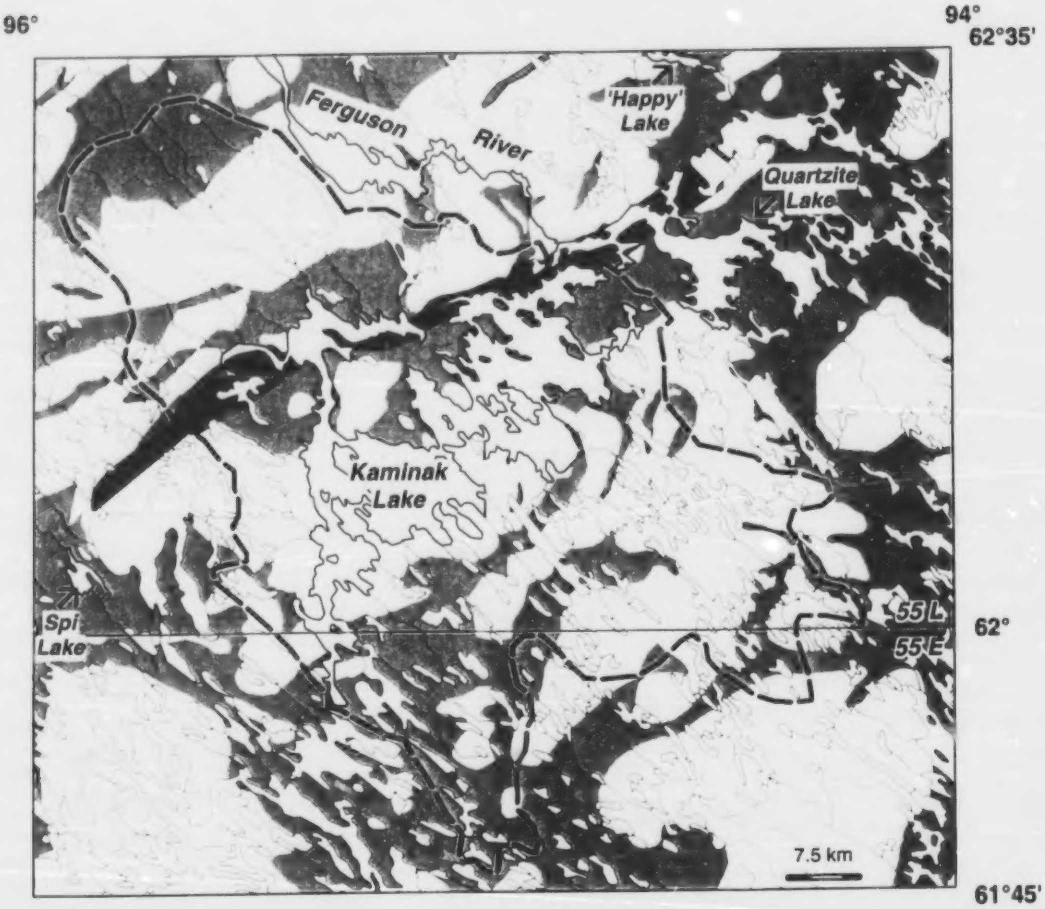

96°
94°
62°35'
Ferguson
River
'Happy'
Lake
Quartzite
Lake
Kaminak
Lake
Spi
Lake
55 L
55 E
62°
7.5 km
61°45'

Figure 4. Detailed location map of study area showing limits of Kaminak Lake drainage basin (dashed), hydrology, and NTS map sheets. Archean greenstone belt rocks (volcanic and sedimentary) are shown in pale grey; Proterozoic belt rocks in dark grey.

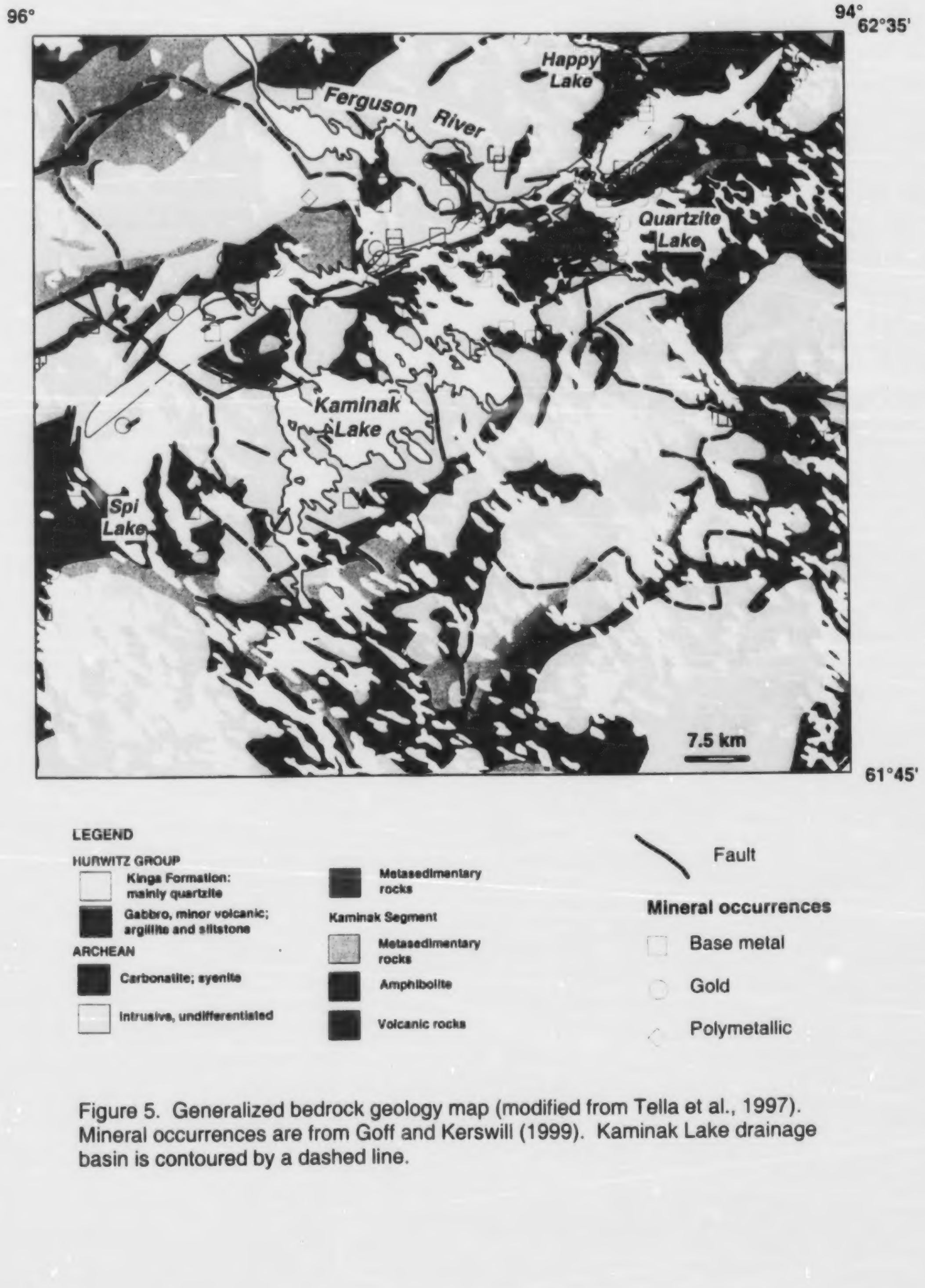

96°
94°
62°35'
61°45'
Happy Lake
Ferguson River
Quartzite Lake
Kaminak Lake
Spi Lake
7.5 km
LEGEND
HURWITZ GROUP
Kinga Formation: mainly quartzite
Gabbro, minor volcanic; argillite and siltstone
ARCHEAN
Carbonatite; syenite
Intrusive, undifferentiated
Metasedimentary rocks
Kaminak Segment
Metasedimentary rocks
Amphibolite
Volcanic rocks
Fault
Mineral occurrences
Base metal
Gold
Polymetallic

Figure 5. Generalized bedrock geology map (modified from Tella et al., 1997). Mineral occurrences are from Goff and Kerswill (1999). Kaminak Lake drainage basin is contoured by a dashed line.

intruded by igneous rocks of similar age (Davis et al., in press). In addition, a deeply weathered, carbonatite-bearing complex is found at the northeast end of Kaminak Lake (Cavell et al., 1992). About 38% of the watershed is underlain by greenstone belt rocks whereas 58% is underlain by intrusive rocks. Set into this crystalline basement are the erosional remnants of a prominant SW-NE trending linear belt of younger (Paleoproterozoic) sedimentary and volcanic rocks outcropping in the northern part of the lake (Irwin et al., 1998). This belt covers less than 5% of the drainage basin, and comprises predominantly Hurwitz Group quartzite (Kinga Fm), minor gabbro, volcanic and fine grained sedimentary bedrock (Ameto Fm). Table 2 gives the coverage of the main bedrock geological units within the Kaminak Lake watershed.

Table 2. Bedrock geological units in the Kaminak Lake drainage basin (land cover only).

% underlain by Archean volcanic belt rocks	30.4%
% underlain by Archean sedimentary belt rocks	7.4%
% underlain by Archean intrusive rocks	56.1%
% underlain by other intrusive rocks (syenite, carbonatite)	1.7%
% underlain by Proterozoic sedimentary belt rocks	4.4%

The area has considerable potential for sulphide and precious metal mineralization. Mineral exploration and prospecting started nearly 70 years ago and continues today over the entire belt. Gossans and rusty zones are common, and glacial sediments derived from mineralization zones have a typical gossannous color, reflecting the oxidation of Fe-bearing sulphides (see Title page photo). Within the Kaminak segment of the belt, known mineral occurrences occur mostly in a corridor that runs from Spi Lake to Happy Lake (Goff and Mills, 1998). Goff and Kerswill (1999) subdivided the occurrences into three types: polymetallic (Au-Ag-Cu-Zn), base metal (Cu-Zn-Pb), and gold occurrences (Fig. 5).

Quaternary

The Kaminak Lake area is located about 120 km southeast from the main axis of the Keewatin Ice Divide, a region towards which glacial ice on the west side of Hudson Bay receded during deglaciation (Shilts, 1980). The radial pattern of erosion, transportation, and redeposition of bedrock components by ice flowing from this centre played a dominant role in the genesis of modern landforms (Aylsworth and Shilts, 1989). While this centre was active, ice flow was radially outward and southeast over the Kaminak Lake area (Fig. 6). At one time during the last glaciation, flow originated from a point farther west than the divide, as evidenced by the abundance of distinctive red Dubawnt Supergroup erratics derived from north and west of the centre (Shilts and Wyatt, 1989; Klassen, 1995). Although ice flow indicators (streamlined landforms and striations) predominantly trend to the SE in the region, older striae indicating flow to the SW, the S, and the ESE are consistently preserved (McMartin and Henderson, 1999). The basin and surrounding region were inundated by marine waters of the Tyrrell Sea as a result of glacio-isostatic depression from 6000 ± 500 years ago to as recently as 4000 years ago (Shilts and Coker, 1995). This led to reworking of upland surficial deposits and accumulation of winnowed fine material in low-lying areas, many of which are occupied by lakes.

Surface till in the area is primarily sandy-silty and red, resulting from a high content of exotic fine grained glacially ground hematite and red sedimentary and volcanic debris, all derived from outcrops of the Dubawnt Supergroup, 150 km NW of the area. Surficial deposits within the Kaminak Lake drainage basin are primarily thick till (44%) and thin till overlying bedrock (23%). Bedrock outcrops cover about 13% of the basin. Undifferentiated alluvium and marine fine grained sediments generally overlain by 40 cm to more than 1 m of fibrous peat ("shallow peatlands") cover about 16% of the watershed, and they are concentrated in the northwest part of the drainage basin. Table 3 summarizes the surficial geology cover within the Kaminak Lake drainage basin, calculated from the digital surficial geology map compilation (Appendix XXIII, Part 4).

Table 3. Surface geological units in the Kaminak Lake drainage basin (land cover only).

% underlain by "shallow peatlands"	15.9%
% underlain by marine sediments	3.2%
% underlain by glaciofluvial sediments	0.9%
% underlain by thin till over bedrock	23.5%
% underlain by rock outcrops	12.6%
% underlain by thick till	43.9%

Soils characteristics

Two types of soils are present in the Kaminak Lake area: 1) Turbic Cryosols, prevalent in glacial sediments, and 2) Organic Cryosols, occurring essentially in shallow peatlands that cover low lying areas. Cryoturbation of these soils is common, and it may be indicated by patterned ground features such as sorted and unsorted nets, circles (mudboils), polygons, stripes, and earth hummocks.

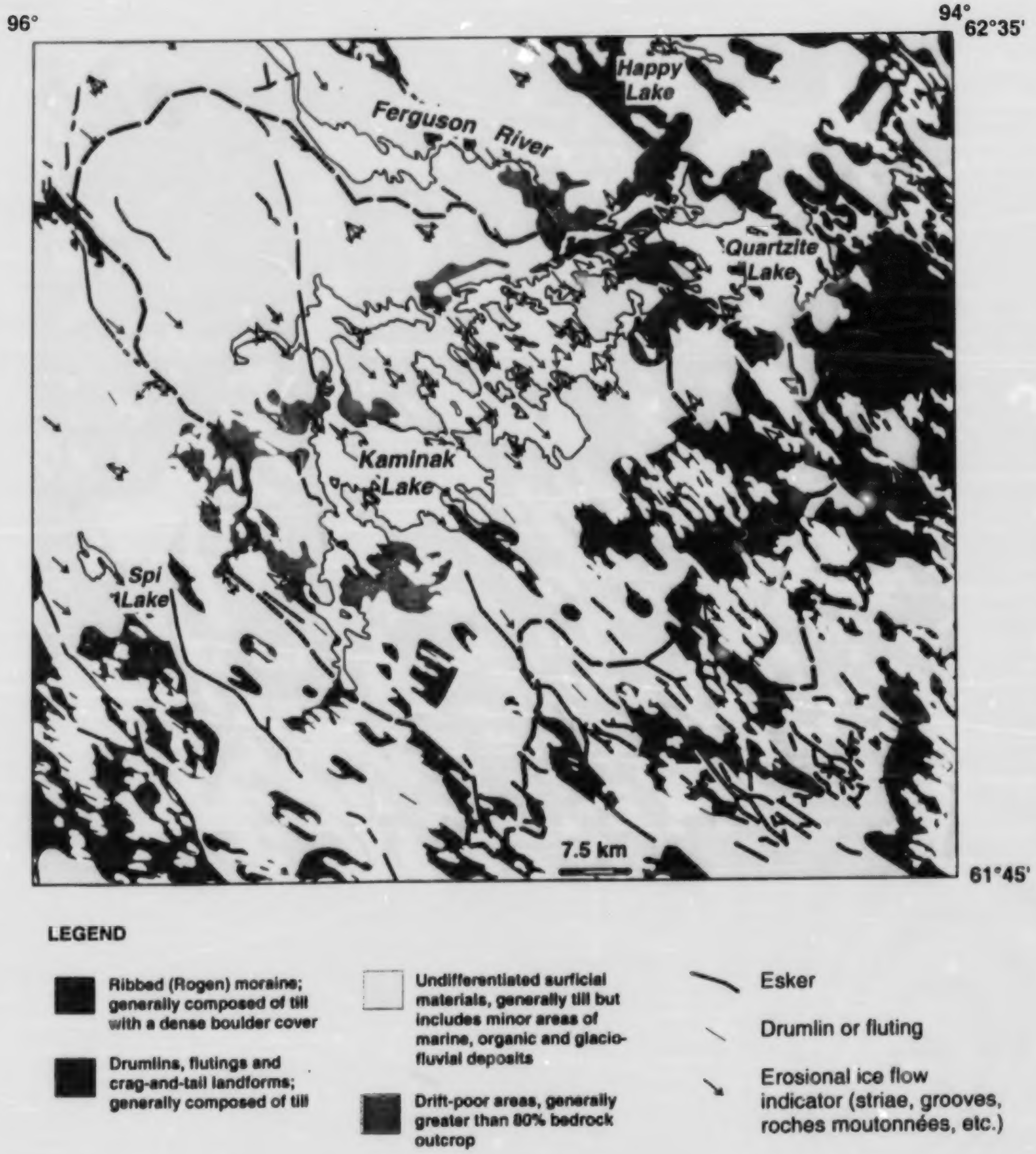

96°
94°
62°35'
61°45'
Happy Lake
Ferguson River
Quartzite Lake
Kaminak Lake
Spi Lake
7.5 km
LEGEND
Ribbed (Rogen) moraine; generally composed of till with a dense boulder cover
Drumlins, flutings and crag-and-tail landforms; generally composed of till
Undifferentiated surficial materials, generally till but includes minor areas of marine, organic and glacio-fluvial deposits
Drift-poor areas, generally greater than 80% bedrock outcrop
Esker
Drumlin or fluting
Erosional ice flow indicator (striae, grooves, roches moutonnées, etc.)

Figure 6. Generalized surficial geology map (modified from Aylsworth and Shilts, 1989). Erosional ice flow indicators taken from McMartin and Henderson (1999). Kaminak Lake drainage is contoured by a dashed line.

In Turbic Cryosols, a thin immature soil can develop where a thin humus layer covers the glacial sediments (Fig. 7). However frost action constitutes a major factor in disrupting and destroying the poorly developed soil profiles in permafrost regions (Shilts, 1973). The net result is a vertical mixing of the soil, where surface organic horizons and weathered material can be redistributed at depth in the active layer. Frost heaving and churning can also bring relatively fresh bedrock fragments from below the permafrost table to the surface. C-horizons are therefore heterogeneous and variably oxidized in the area, varying from relatively unoxidized to moderately oxidized (McMartin, 2000). In mudboils where the material is extruded to the surface (Fig. 7), C-horizon samples are more homogenized and generally weakly weathered.

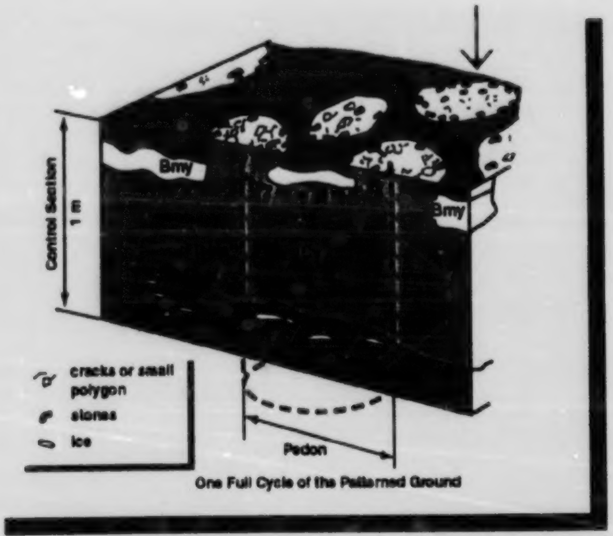


Figure 7. Pedon of Turbic Cryosol in areas of nonsorted circles (modified from Agriculture Canada, 1987). Ah = organic rich mineral horizon; Bmy = B horizon, slightly altered by hydrolysis, oxidation, or solution, and cryoturbated; Cy = C horizon, cryoturbated; Cz = C horizon, frozen (permafrost). Red arrow indicates mudboil (nonsorted circle).

Organic Cryosols consist of organic soil material (>30% LOI) more than 40 cm thick and underlain by permafrost within 1 m of the surface. In the Kaminak Lake area, these soils consist of fibrous peat mainly derived from hydrophytes, principally sedges and grasses (*Carex sp.*, *Eriophorum sp.*), and some bryophytes, typically *Sphagnum sp.* (Rencz and Shilts, 1981).

METHODOLOGY

Field procedures

Field work was undertaken during the summers of 1997 and 1999. Access was by boat or helicopter, from a GSC camp in 1997 on an island in the NW part of Kaminak lake and from a mineral exploration camp in 1999 near Victory Lake (Comaplex Minerals Co.). Nearly 158 sites were visited and are described in Appendix I.

In 1997, field work consisted of collecting 3 kg-till samples from mudboils in 10 vertical profiles extending down to permafrost. The profiles were located along one transect parallel to the dominant ice flow direction (SE) and cutting across base metal mineralization and potential Hg-rich Hurwitz Group rocks (Stations 97MITE-1 to 10). Humus samples (100 g) in surrounding organic rims, as well as dwarf birch (*Betula glandulosa*) leaf samples (first year and second year growth), were collected at each transect site. Additional surface till samples were collected over varied geological terrains across the greenstone belt (Stations 97MITE-A to K). Bedrock samples from each major lithological unit in both the Proterozoic and Archean belts were also collected. Surface lake water samples were collected in high density polyethylene bottles (Nalgene, HDPE) near the transect and near potential Hg-rich bedrock sources. All samples were filtered upon collection, using a 0.45 µm nylon syringe filter in a polypropylene housing (Chromatographic Specialties, C616154) and a latex and rubber free, polypropylene 50 cc syringe (Delta Scientific 6603-2016), rinsed with distilled deionized water. Filtered water samples were separated upon return to camp into aliquots for cation, anion and Hg analyses. The cation aliquot was preserved by acidification with high purity nitric acid (Seastar, Double Distilled) to 0.4%. The Hg aliquot was preserved by the addition of BrCl (prepared according to USEPA Method 1631) to 0.5%. No preservation was required for the anion aliquot. Water samples were shipped to the GSC laboratories in non-chilled containers and stored at 4°C until analysed.

In 1999, field work involved till and humus sampling near Hg-rich sources identified in 1997 (Kaminak, Spi and Happy Lakes), and sampling of fibrous/sphagnum peat in earth hummocks from selected peatlands surrounding the northern part of Kaminak Lake. Detailed mineral and organic soil profiles were sampled at selected sites. Lake water samples were collected in Kaminak Lake, Spi Lake and Happy Lake using the same basic methodology as 1997 with the following changes: 1) the filters used were 0.45 µm Sterivex HV filter capsules with a Duripore PVDF membrane and

Eastar® housing (Millipore Corp. SVHV010RS); 2) both filtered (<0.45µm) and non-filtered (bulk) waters were collected, and 3) samples were kept chilled upon collection in the field and during transport to the GSC laboratories. In total, 100 till, 30 humus, 18 peat, 18 birch leave, 26 bedrock and 40 lake water samples were collected in 1997 and 1999. Figure 8 shows the sample location by type. Sample locations and descriptions are presented in Appendix II.

As part of systematic glacial ice flow indicator mapping within the Western Churchill NATMAP Project in the Kivalliq Region, the orientation and relative ages of 179 erosional ice flow indicators were measured from 93 sites in NTS 55L (McMartin and Henderson, 1999). Indicators included striations, grooves, rat tail striae, crescentic gouges and fractures, chattermarks, and roches moutonnées. The sense of ice flow movement was derived from either rat tails, crescentic features, chattermarks and roches moutonnées, where present, or from stoss and lee topography. Relative ages of striated facets were interpreted based on the following criteria: a) a set located in a lee-side position relative to another, is usually older, b) a set found only on the top part of an outcrop will have been formed by the youngest movement, c) a set preserved only in depressions and other low positions is interpreted as older, and d) a deeper set (groove) is usually older than a finer set (microstriae). The location and description of erosional ice flow indicators are presented in Appendix III.

Laboratory procedures

Till, humus, leaf and peat sample preparations were completed at TSD's Sedimentology Laboratory (I. Girard). Sample preparation and analytical procedures for till samples are summarized in Figure 9. Water and bedrock samples were prepared at MRD's laboratories (G. Hall and P. Belanger respectively).

Pebble lithology of till

About half of a 2 kg split of all till samples was air dried and dry-sieved at 2 mm (10 mesh). The oversize material was wet-sieved at 4 mm to collect the 2-4 mm fraction for lithological analysis. Pebbles were visually examined using a binocular microscope (maximum 250 clasts) and lithologies were divided into Dubawnt Supergroup clasts (Thelon sandstone, Pitz volcanic rocks, undifferentiated Dubawnts), Hurwitz Group clasts (Kinga quartzite, Ameto dolomite, Ameto slate), undifferentiated Kaminak Group/Hurwitz Group, and granitoids. Results were calculated by weight

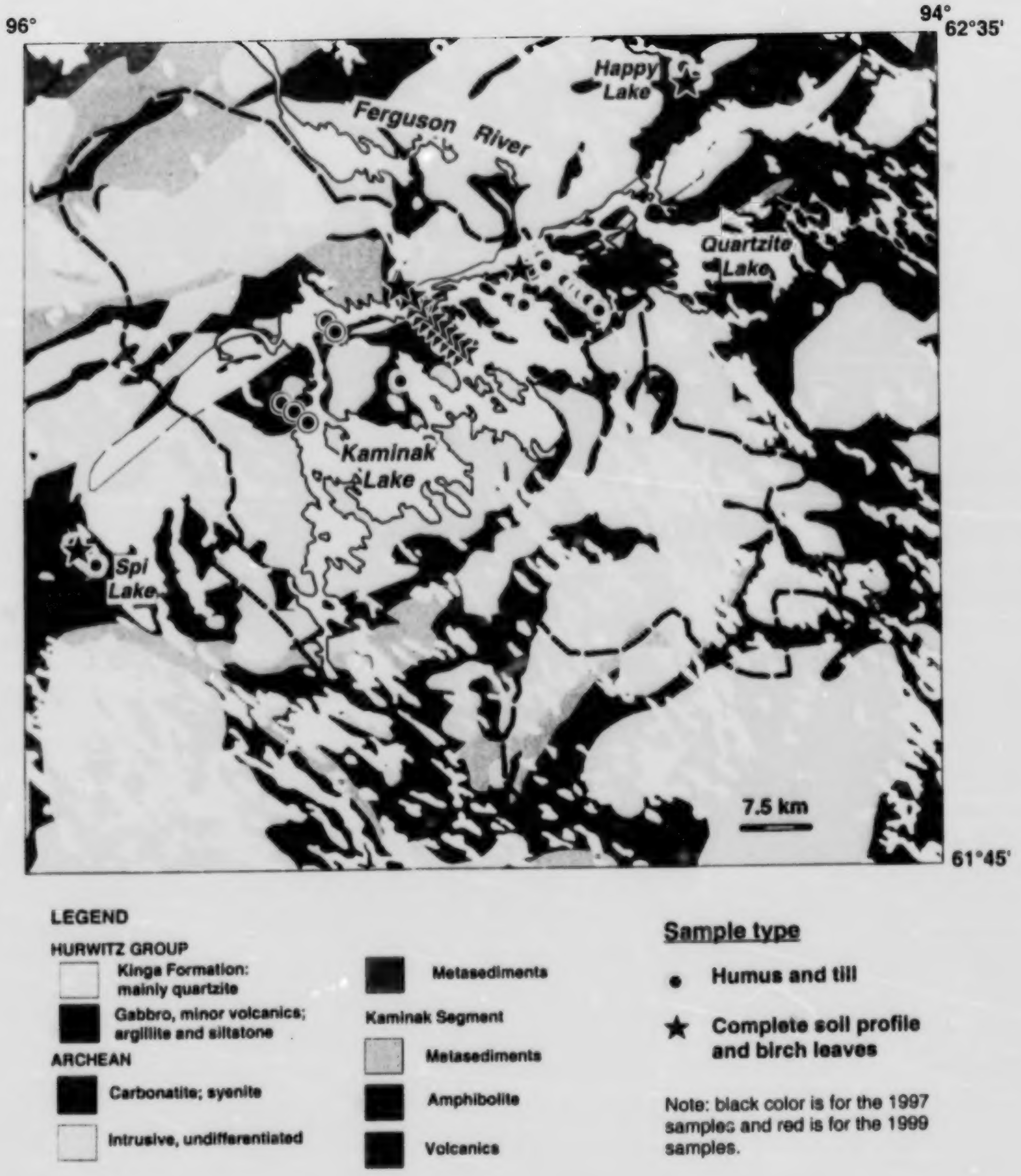
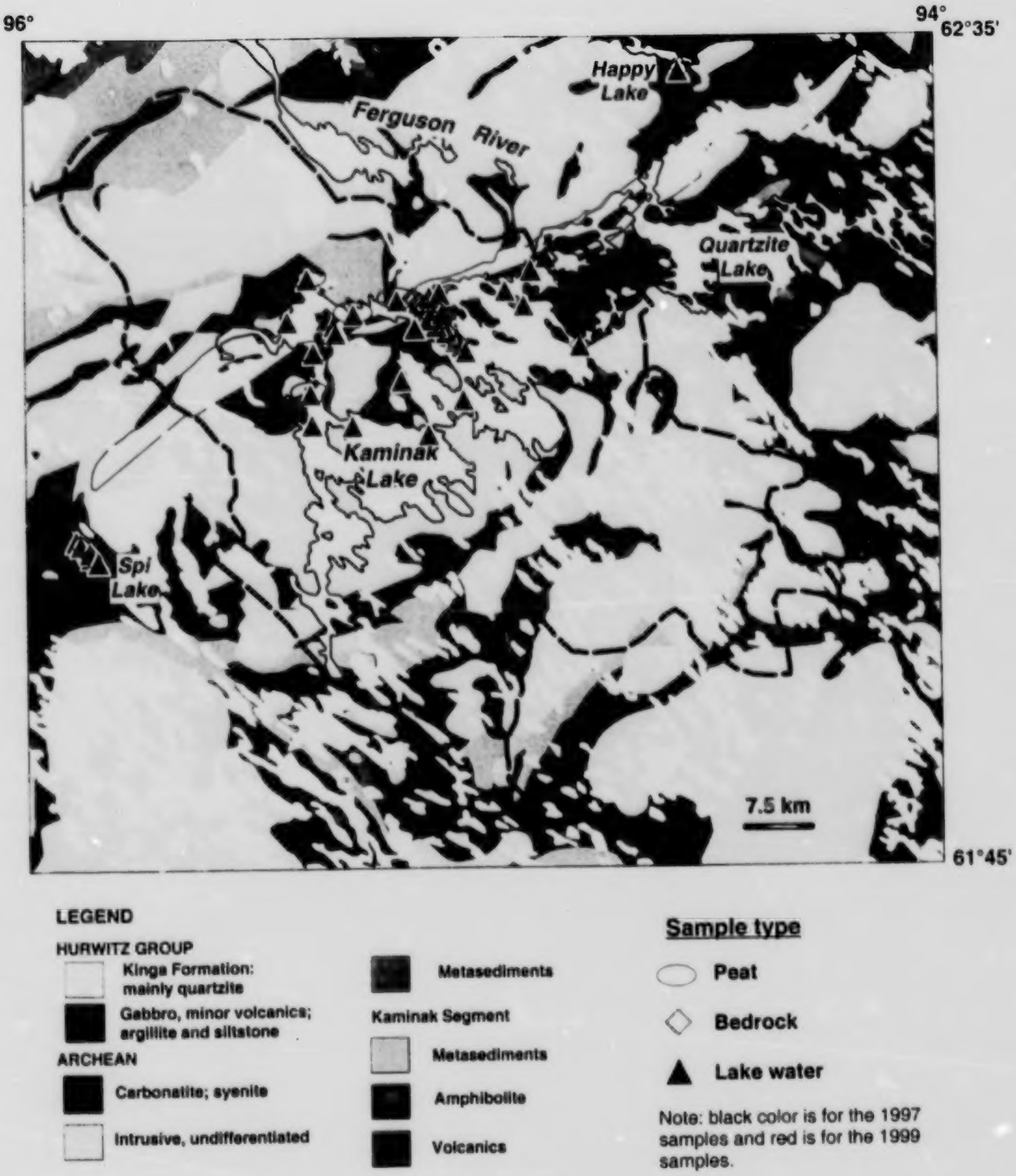

96°
94°
62°35'
Happy Lake
Ferguson River
Quartzite Lake
Kaminak Lake
Spi Lake
7.5 km
61°45'
LEGEND
HURWITZ GROUP
Kinga Formation: mainly quartzite
Gabbro, minor volcanics; argillite and siltstone
ARCHEAN
Carbonatite; syenite
Intrusive, undifferentiated
Metasediments
Kaminak Segment
Metasediments
Amphibolite
Volcanics
Sample type
● Humus and till
★ Complete soil profile and birch leaves
Note: black color is for the 1997 samples and red is for the 1999 samples.

Figure 8a. Location map for birch leaves, humus and till samples collected as part of the MITE Kaminak Lake project.


96°
94°
62°35'
Happy Lake
Ferguson River
Quartzite Lake
Kaminak Lake
Spi Lake
7.5 km
61°45'
LEGEND
HURWITZ GROUP
Kinga Formation: mainly quartzite
Gabbro, minor volcanics; argillite and siltstone
ARCHEAN
Carbonatite; syenite
Intrusive, undifferentiated
Metasediments
Kaminak Segment
Metasediments
Amphibolite
Volcanics
Sample type
Peat
Bedrock
Lake water

Note: black color is for the 1997 samples and red is for the 1999 samples.

Figure 8b. Location map for peat, bedrock and lake water samples collected as part of the MITE Kaminak Lake project.

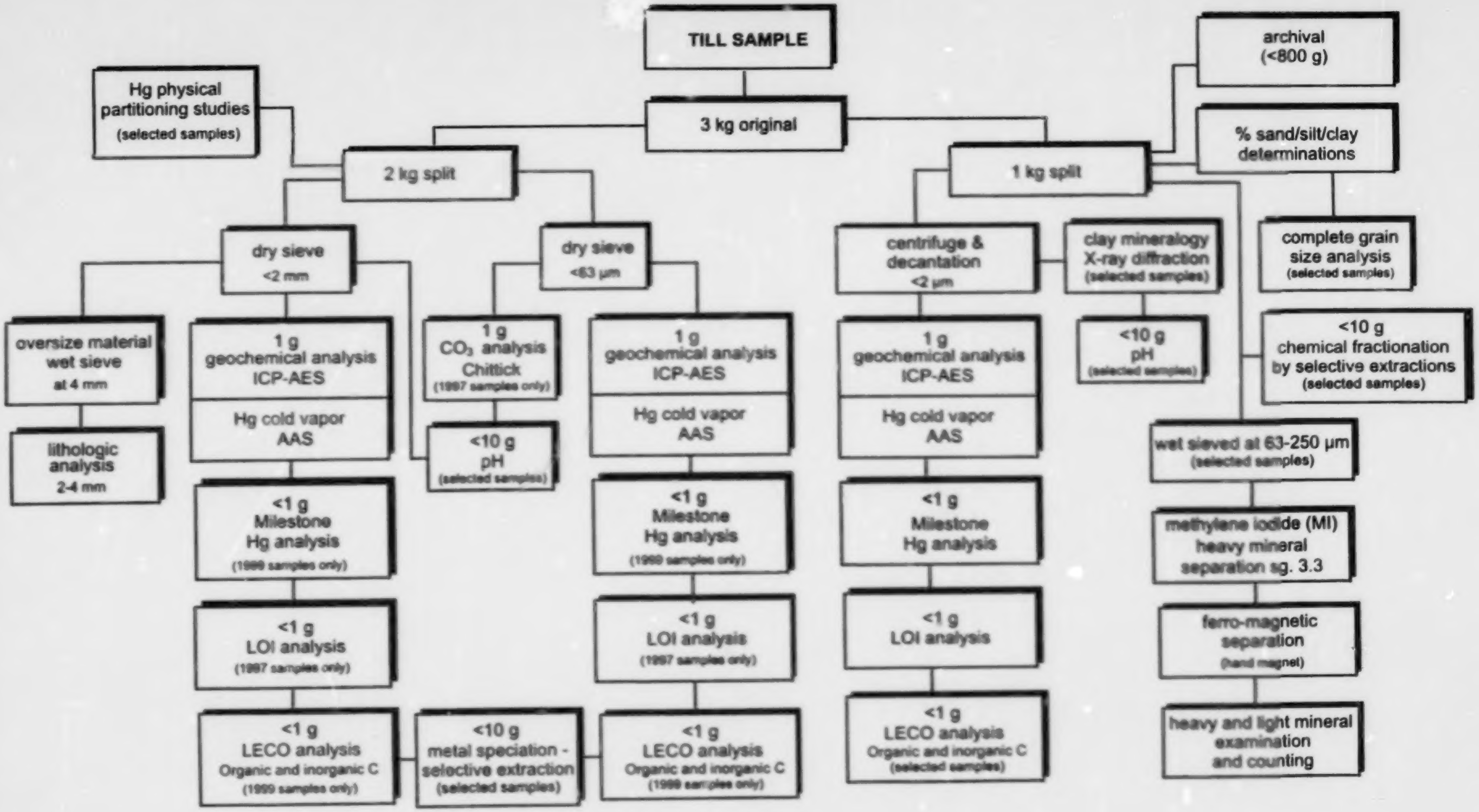

TILL SAMPLE
3 kg original
2 kg split
1 kg split
Hg physical partitioning studies (selected samples)
archival (<800 g)
% sand/silt/clay determinations
complete grain size analysis (selected samples)
<10 g chemical fractionation by selective extractions (selected samples)
dry sieve <2 mm
dry sieve <63 µm
centrifuge & decantation <2 µm
clay mineralogy X-ray diffraction (selected samples)
oversize material wet sieve at 4 mm
lithologic analysis 2-4 mm
1 g geochemical analysis ICP-AES
Hg cold vapor AAS
1 g CO3 analysis Chittick (1997 samples only)
<10 g pH (selected samples)
<1 g Milestone Hg analysis (1999 samples only)
<1 g LOI analysis (1997 samples only)
<1 g LECO analysis Organic and inorganic C (1999 samples only)
<10 g metal speciation - selective extraction (selected samples)
<1 g Milestone Hg analysis
<1 g LOI analysis
<1 g LECO analysis Organic and inorganic C (selected samples)
wet sieved at 63-250 µm (selected samples)
methylene iodide (MI) heavy mineral separation sg. 3.3
ferro-magnetic separation (hand magnet)
heavy and light mineral examination and counting

Figure 9. Flow diagram illustrating analytical scheme for till samples.

% of the total sample and are presented in Appendix IV.

Till matrix mineralogy

About 300-500g of the 2 kg split of till samples was air-dried and dry-sieved using a stainless steel 230 mesh screen to obtain the <0.063 mm fraction. About 1 g of this fraction (1997 samples only) was analysed for carbonate content using the Chittick method at the Sedimentology Laboratory (Dreimanis, 1962). The procedure determines the concentrations of calcite and dolomite based on the different reaction rates of those minerals in hydrochloric acid. The results are presented in Appendix V as weight % calcite, weight % dolomite, weight % total carbonate, and calcite/dolomite ratios.

The clay-sized fraction (<2 μm) of about 300-500 g of a 1 kg split of all till samples was separated by centrifugation and decantation following the method of Lindsay and Shilts (1995). About 100 mg of freeze-dried clay (selected samples, no sodium metaphosphate used) was used for X-ray powder diffraction analysis (XRD) at MRD's Mineralogical Laboratory (J. Percival). X-ray patterns of air-dried samples mounted on glass slides were recorded on a Philips PW1710 automated powder diffractometer equipped with a graphite monochromator, Co Kα radiation at 40 kV and 30 mA. The samples were also X-rayed following saturation with ethylene glycol and heat treatment (550° C). A specialized software (JADE) was used for pattern interpretation and semi-quantitative determination. A tabular report providing weight percent of minerals is presented in Appendix VI.

About 100-300 g of the 1 kg split from selected till samples was wet sieved at 63-250 μm and then put in methylene iodide for heavy mineral separation (specific gravity of 3.3). After a ferromagnetic separation, both light and heavy mineral concentrates (HMC) were mounted on glass slides, visually examined under the binocular microscope, and counted. Results were calculated by % mineral counted and are presented in Appendix VII.

Standard geochemistry of till, humus and peat

Approximately 1 g of the <2 mm fraction of all till samples (separated from the 2 kg split) was analysed at Chemex Ltd. for a suite of trace and major elements using ICP-AES (inductively coupled plasma atomic emission spectrometry), following an aqua regia digestion ($HCl-HNO_3$, 3:1). Mercury was determined using CV-AAS (cold vapor atomic absorption spectrometry) after an aqua regia leach. Detection limits and analytical results for the <2 mm fraction are presented in Appendix VIII. The same geochemical determinations were completed on about 1 g of the silt and clay-sized fraction (<63 µm; separated from the second half of the 2 kg split) and 1 g of the clay-sized fraction (separated from the 1 kg split) of the till samples at Chemex Ltd. Detection limits and analytical results for the <63 µm and <2 µm fractions are presented in Appendix IX and X respectively.

Humus samples were air-dried at room temperature and disaggregated with a porcelain pestle, prior to dry sieving using stainless steel sieves (10 mesh) to recover the <2 mm fraction. Geochemical analyses for major and trace elements were conducted on this fraction at Chemex Ltd. using ICP-AES, following an aqua regia digestion. Mercury was determined using CV-AAS (cold vapor atomic absorption spectrometry) after an aqua regia leach. Detection limits and analytical results for the <2 mm humus fraction are presented in Appendix XI.

Peat samples were weighed and oven-dried at 28°C. The dried samples were then reweighed and crushed with a blender. Peat samples were digested with nitric-perchloric acid prior to ICP-AES analysis for a suite of major and trace elements at Chemex Ltd.. As, La, Sb and W were measured by neutron activation analysis following irradiation with thermal neutrons in a nucleor reactor (INAA). Hg was analysed by CV-AAS, after an aqua regia digestion. Detection limits and analytical results for the peat samples are presented in Appendix XII.

Milestone AMA-254 Hg determinations

Hg was determined directly by CV-AAS with a Milestone AMA-254 (Hall and Pelchat, 1997a) on air-dried and crushed dwarf birch leaf samples, and on all peat and humus samples. The clay-sized fraction of all till samples was subjected to the same Hg determination, as well as the <63 and <2 mm fractions of the 1999 till samples. A selection of 1997 bedrock samples pulverized to powder size (<75 µm), and archived silt and clay-sized fractions of till samples collected in 1970-73 (see Appendix XXIII) were analysed for Hg with the Milestone AMA-254. All Milestone determinations were completed at TSD's Sedimentology Laboratory in 1998-99 and at MRD's Mercury Laboratory in 2000. Detection limits and analytical results for all samples are presented in Appendix XIII.

Physical tests

Physical tests were completed on selected samples at GSC's Sedimentology Laboratory to determine various sediment properties. Loss-on-ignition (LOI), an approximation of total organic content, was done on all peat, humus, and clay-sized fraction (<0.002 mm) of till samples, and on the silt and clay-sized (<0.063 mm) and <2 mm fractions of the1997 till samples. Results for LOI are expressed as % weight loss of the dry weight after heating a small portion at 550°C for one hour (Sheldrick, 1984). Organic carbon was determined with a LECO Carbon Analyzer instrument on all peat samples, and on selected humus and till fractions collected in 1997 and 1999 (Sheldrick, 1984). pH was determined on all peat samples, and on selected humus and till fractions collected in soil profiles following the method described in Knight et al. (2000). Bulk densities of peat were determined only for samples collected in containers of known volume. The results for LOI, organic C, pH and bulk densities are compiled in Appendix XIV.

About 300-500 g of the 1 kg split of all till samples was used for textural analysis at GSC's Sedimentology Laboratory. The <2 mm (-10 mesh) fraction of bulk samples was separated by dry-sieving. The sand fraction (0.063-2 mm) was separated from the silt and clay-sized fraction (<0.063 mm) by dry- sieving (+ 230 mesh). The silt and clay fractions (-230 mesh) were determined with a Galai Particle Size Analyzer (PSA). The results were calculated as a percentage weight of the <2 mm fraction and are presented in Appendix XV. Complete grain size distributions were determined with the PSA on a selection of samples and results are also included in Appendix XV.

Hg physical partitioning studies in till

About 300 g of the 2 kg split of 20 selected till samples was freeze-dried for 24 hours. The dry weight of each sample was determined and separated into five fractions following a procedure modified from Plouffe (1997). Only stainless steel sieves were used in the separation process. The >2 mm fraction was removed by dry sieving. The silt and clay-sized fraction (<63 µm) was separated from the coarser particles by dry and wet sieving (without using the defloculant solution). The silt-sized fraction (2-63 µm) was separated from the clay-sized fraction (<2 µm) using a centrifuge (Lindsay and Shilts, 1995). The >63 µm material was then dried at room temperature under a fume hood and dry sieved to three different grain size ranges: very fine sand (63-125 µm), fine sand (125-250 µm) and medium to coarse sand (250 µm - 2 mm). Each grain size fraction was weighed and then crushed using an electrical ceramic ball mill (sand fractions only). Hg was determined on all fractions with the Milestone AMA-254; LOI was determined after heating a small portion at 550°C for one hour (Sheldrick, 1984). All Hg physical partitioning results are presented in Appendix XVI.

Chemical fractionation studies

Hg adsorbed, complexed or chelated by the "soluble organic" component (humic and fulvic acids) of selected humus and organic-rich, clay-sized till fractions was measured after a sodium pyrophosphate leach (0.1M $Na_4P_2O_7$, pH=10) at MRD's Analytical Method Development Laboratory (Hall et al., 1996a). The leachates were analysed by hydride inductively coupled plasma mass spectrometry (HYD-ICP-MS). Ultracentrifugation prior to analysis was used on till samples to prevent peptization and dispersion of clay-sized particles (Jeanroy and Guillet, 1981; Hall, 1998). Soluble organic C was also determined on the leachates using the Shimadzu TOC-5000 Total Organic Carbon Analyzer. Results for Hg associated to the labile organic component of humus and till samples are presented in Appendix XVII together with soluble organic C contents.

Chemical fractionation of trace and major elements was determined on selected humus, till fractions (<0.002, <0.063 and <2 mm) and peat samples at Chemex Ltd. by selective extraction procedures developed by Hall (1998). A maximum of four metal fractions were determined: 1) adsorbed, exchangeable and associated with carbonates (by ICP-MS, sodium acetate leach); 2) associated with the labile organic component (by ICP-MS, sodium pyrophosphate leach); 3) associated with easily and moderately reducible iron and manganese compounds (by ICP-MS, hot and strong hydroxylamine hydrochloride leach); and 4) associated with more resistant (non-labile) residual phases (by ICP-MS/ICP-AES, an ultratrace aqua regia package). Only the metal fractions from the 1997 samples were extracted in sequence and only the humus samples had the four metal phases determined (Figure 10). All chemical fractionation results are compiled in Appendix XVIII. The aqua regia non-sequential results are provided in Appendices VIII to XI.

The remainder (<800 g) of all original(bulk) till, humus and peat samples was archived and stored in TSD's permanent storage area at Tunney's Pasture.

Water chemistry

The chemical analyses for all lake water samples are reported in Appendix XIX for the filtered (<0.45 µm) and unfiltered (bulk) samples separately. The <0.45 µm fraction contains the

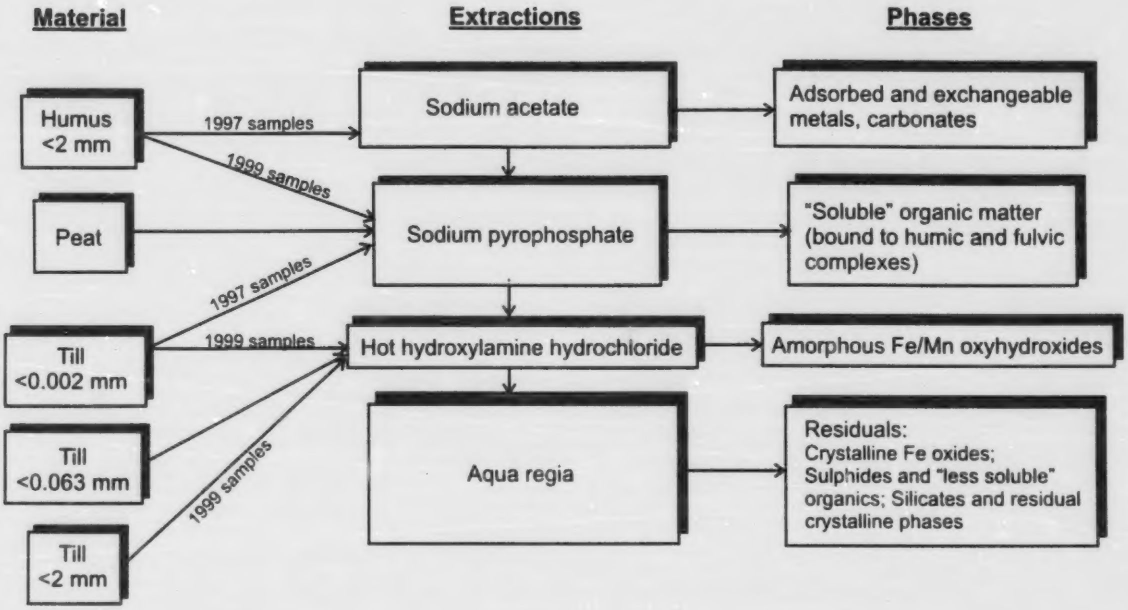

Material
Extractions
Phases
Humus <2 mm
Peat
Till <0.002 mm
Till <0.063 mm
Till <2 mm
1997 samples
1999 samples
1997 samples
1999 samples
1999 samples
Sodium acetate
Sodium pyrophosphate
Hot hydroxylamine hydrochloride
Aqua regia
Adsorbed and exchangeable metals, carbonates
"Soluble" organic matter (bound to humic and fulvic complexes)
Amorphous Fe/Mn oxyhydroxides
Residuals:
Crystalline Fe oxides;
Sulphides and "less soluble" organics; Silicates and residual crystalline phases

Figure 10. Selective extraction scheme (modified from Hall, 1998). Only the metal fractions from the 1997 samples were extracted in sequence. The 1999 humus and peat samples were not processed with a hot hydroxylamine hydrochloride leach.

dissolved fraction of the water load as well as some trace elements associated with colloidal material (Horowitz et al., 1996). Analysis was performed in MRD's Analytical Method Development Laboratory. Trace metals were determined using a VG PQII ICP-MS with a Meinhard concentric glass nebulizer, Type K (solution uptake rate 1 ml/min), a quartz Scott-type Double pass chilled spray chamber (2°C) and a 27 MHz standard quartz torch. The argon flow-rates are: Cool 12.5 l/min; Auxiliary 0.85 l/min; and Nebulizer 0.9 l/min. The RF power is 1350 Watts. Isotopes measured and corrections for spectral interferences are detailed in Hall et al. (1995) and Hall et al. (1996b). Hg was determined by hydride ICP-MS as described in Hall and Pelchat (1997b). Anions were determined using a Dionex 2100 IC (ion chromatography) System at MRD's Analytical Chemistry Laboratory (P. Belanger). Total organic carbon (TOC) and dissolved organic carbon (SOC) were determined using a Shimadzu TOC-5000. pH was analyzed on a Cole Palmer 5800-05 Solution Analyzer with an Accumet Ag/AgCl combination electrode. Alkalinity was analyzed on a Mandel PC Titrate system equipped with a Gilson 222 Autosampler.

Lithogeochemistry

A selection of pulverized 1999 bedrock samples were analysed for trace elements by lithium meta-borate fusion and ICP-MS at Chemex Ltd.; major and minor element oxides were determined by x-ray fluorescence (XRF). Hg was determined at XRAL Laboratories by CV-AAS on all bedrock samples, following an aqua regia digestion. Lithogeochemistry data for the bedrock samples are presented in Appendices XXa and XXb.

During regional metallogenic investigations completed as part of the Western Churchill NATMAP Project, samples from mineral showings/deposits were collected in the Henik-Kaminak-Tavani greenstone belt (Goff and Kerswill, 1999). Samples from the most significant metallic mineral occurrences were analysed for Hg by CV-AAS (aqua regia leach) at XRAL Laboratories; trace and major elements were determined by ICP-AES, following a multi-acid digestion; As, Bi, Sb, Se and Te were determined by AAS, after an aqua regia digestion hydride; Au was analysed by lead fire assay with an AA/ICP finish. Appendix XXc presents the descriptions/locations and the lithogeochemical results for the mineral occurrences samples.

SEM examination

A selection of Hg-rich mineral occurrences bedrock samples were examined under the scanning electron microscope (SEM) to identify Hg-bearing minerals. A Leica Cambridge

Stereoscan S360 SEM equipped with an Oxford/Link eXL-II energy-dispersion X-ray analyzer, Oxford/Link Pentafet Be window/light element detector, and an Oxford/Link Tetra backscattered electron detector was used. Samples were scanned using the backscattered electron imaging mode specifically to identify grains with elements of high atomic number. A microprobe was used to map out Hg concentrations in potentially Hg-rich minerals. A description of the minerals identified under the SEM is presented in Appendix XXI.

Published datasets

The following datasets for the Kaminak Lake area are included in Appendix XXIII of this publication (on CD-ROM version only):

1) A list and description of mineral occurrences derived from the NORMIN database:
Goff, S.P. and Mills, A., 1998. Significant mineral occurrences of the Central Rankin - Ennadai Supracrustal Belt: Spi-Kaminak-Quartzite Lakes & Heninga-Kogtok Lakes (NTS 55 E/13-14, 55 L/1-16, 65 H/15-16 & 65 I/1-2); DIAND NWT Geology Division EGS 1998-15.

2) Geochemical results for the silt and clay-sized fraction of till samples collected in the early 1970's and reanalysed in 1988-89:
Shilts, W.W. and Wyatt, P.H., 1989. Gold and base metal exploration using drift as a sample medium, Kaminak Lake - Turquetil Lake area, District of Keewatin; GSC Open File Report 2132 (Appendix 3).

3) Hg levels in Kaminak Lake fish collected in 1971 and analysed at the Freshwater Institute (Department of Fisheries and Oceans (DFO) (also included at the end of the paper report):
Sherbin, I.G., 1979. Mercury in the Canadian Environment; Canadian Environmental Protection Service, Environment Canada, Report EPS 3-EC-79-6 (Appendix 2);
Unpublished Hg levels in Kaminak Lake fish collected in 1995-1996 and analysed at the Freshwater Institute were kindly provided by Lyle Lockhart (DFO) in 2000. Available Hg concentrations lake fish collected in nearby lakes are also included in Appendix XXIII.

4) A digital compilation of the surficial geology of the Kaminak Lake area (mainly unit polygons) between latitudes 61°45' and 62°35' N and longitudes 94° and 96°:
Arsenault, L., Aylsworth, J.M., Kettles, I.M. and Shilts, W.W., 1981. Surficial geology, Kaminak Lake, District of Keewatin; Geological Survey of Canada, Map 7-1979, 1:125 000;
Arsenault, L., Aylsworth, J.M., Cunningham, C.M. and Shilts, W.W., 1982. Surficial geology, Eskimo Point, District of Keewatin; Geological Survey of Canada, Map 8-1980, 1:125 000.

5) The most recent bedrock map compilation, completed as part of the NATMAP Western Churchill Project: Irwin, D.A., Hanmer, S., Sandeman, H.A., Rainbird, R.H., Peterson, T.D., Relf, C., Ryan, J.J. , Goff, S.P. and Kerswill, J.A.,1998. Geology, Carr-Kaminak-Quartzite lakes area, Kivalliq region, Northwest Territories; Geological Survey of Canada, Open File 3649, scale 1:125 000.

Quality Assurance and Quality Control (QA/QC)

Analysis of laboratory duplicate samples and analytical standards were used to monitor analytical precision and accuracy of geochemical results (e.g. Garrett, 1969, 1991). Analytical precision was assessed by inserting laboratory duplicate samples, i.e., samples prepared from the same field sample, but submitted with different sample numbers. One laboratory duplicate in approximately 10-15 samples was submitted for analysis. Field duplicates were submitted only for the determination of water chemistry. The analytical precision was determined by first calculating the analytical variance (A^2) as follows (Garrett, 1969):

$$\mathbf{A^2} = \frac{1}{2N} \Sigma (X_{1i}-X_{2i})^2$$

Where A^2 is the analytical variance, X_{1i} is the sample analysis result, X_{2i} is the duplicate sample analysis result and N is the number of duplicate pairs. Logarithmic values were used only for the elements that had a range exceeding one order of magnitude (rf. Appendix XV). The precision was then computed (modified from Garrett, 1969):

$$\textbf{RSD} \text{ (95\% Confidence level)} = \frac{A \times 100\%}{X_{av}}$$

Where X_{av} is the average of all the replicate results. The value of Student's "t" was not used here therefore the precision is an estimate of the Relative Standard Deviation (RSD). A single-factor fixed analysis of variance model can be used to determine if the analytical error is significantly smaller than the overall data variability (modified from Garrett, 1969). First the data variance was computed:

$$\mathbf{D^2} = \frac{1}{N-1} \Sigma (X_i-X_{av})^2$$

Where D^2 is the data variance, X_i is the average of each duplicate sample analysis result, X_{av} is the average of all the sample analysis results and N is the number of duplicate pairs. Again, log values were used only for the elements that had a range exceeding one order of magnitude. Then a variance ratio was determined:

$$F = \frac{2 \times D^2}{A^2}$$

The variance ratio should exceed about 3 for 9 pairs of replicates (maximum number measured for this study), and about 7 for 4 pairs (95% Confidence level). The ratio rises as the number of replicates drops.

The results of all duplicate sample analysis are compiled and summarized in Appendix XXIIa and XXIIb. The analytical precision and variance ratios have been calculated for those elements above detection limits when there was at least 4 replicate analysis. Laboratory duplicates were inserted only with samples analysed for trace and major element geochemistry, Milestone Hg analysis, LOI, organic C and pH, chemical fractionation studies, water chemistry and lithogeochemistry.

1) Appendix VIII - Till geochemistry (<2 mm); by ICP-AES, aqua regia leach: For the <2 mm fraction of till analysed by ICP-AES, the precision is very good for most elements, particularly for Cr, Cu, Fe, Mg, Mn, P, Ti, V and Zn (<±5%). This method is less effective for Co, La, Na and Pb (>±15%), although concentrations are very close to the lower detection limits for those elements. Na and Pb analysis show particularly poor reproducibility (>±25%) because of low levels, and alternative analytical methods are suggested if better precision is required. All variance ratios are higher than 3 (except for Na) hence the data variability is much higher than the analytical error.

2) Appendix IX - Till geochemistry (<0.063 mm); by ICP-AES, aqua regia leach: Duplicate analyses of the <0.063 mm fraction of till samples are generally as precise as for the <2 mm fraction using the same method, and variance ratios are also high (F>4). Exceptions include Ti which is significantly less precise (±20%) than with the coarse fraction.

3) Appendix X - Till geochemistry (<0.002 mm); by ICP-AES, aqua regia leach: For the <0.002 mm fraction of till analysed by ICP-AES, the precision is good for most elements, particularly for Ca, Co, Fe, Na, Ti and V (<±5%). This method is less effective for As and Be at low concentrations (>±15%), but is likely appropriate at higher levels. Variance ratios are relatively high (F>4); however Cr, La, Mn, Ti and V analysis indicate that the analytical error is higher than the data

variability (*F*<4).

4) Appendix XI - Humus geochemistry (<2 mm); by ICP-AES, aqua regia leach: For humus analysed by ICP-AES, the analytical precision is very good for most elements (<±15%). The method is less effective for La, Mo and Pb (>±20%) and relatively ineffective for As and Na (>±45%); however these elements occur in low concentrations in humus. All elements have high variance ratios (*F*>7), except for Na.

5) Appendix XII - Peat geochemistry; by ICP-AES, nitric-perchloric acid digestion: For peat geochemistry, only one replicate laboratory sample was submitted for analysis, therefore the precision cannot be evaluated. However, the single replicate analysis appears acceptable.

6) Appendix XIII - Milestone AMA-254 Hg determinations: For the Milestone Hg determinations, only the <0.002 and <2 mm fractions of till had sufficient replicate analysis for evaluating the precision. The analytical precision is very good (±9%) for the finest fraction but less so for the coarser fraction (±32%), however both showed relatively high variance ratios (*F*>5). Replicate analysis for other sample materials (leaves, humus and bedrock) appear acceptable.

7) Appendix XIV - LOI, Organic Carbon and pH determinations: Only the till fractions had sufficient replicate analysis for evaluating the precision of the LOI. The analytical precision is fairly good (±14%) for the finest fraction (<0.002 mm), but less so for the coarser fractions (>±30% and *F*<5), likely reflecting the organic heterogeneity in the mineral samples. The replicate analysis for the LOI of the organic materials (peat and humus) appear very good. For the organic C determinations, the little data available indicate a very good reproducibility, both for mineral and organic samples. The few replicate pH analysis for the coarse till fractions (>2 mm) suggest a very good precision.

8) Appendix XVII - Hg Fractionation; by HYD-ICP-MS, sodium pyrophosphate leach: For the Hg fractionation studies done in-house, there is no sufficient replicate analysis to calculate the precision but the available results suggest a very good reproducibility.

9) Appendix XVIII - Chemical Fractionation Studies: Although there are very few to no replicate analysis for the sample materials analysed as part of the chemical fractionation studies, the results suggest a generally fair to poor reproducibility for most elements in the till fractions, particularly with

the ICP-MS method for analysis done in sequence. However, the aqua regia leach appears to yield a better reproducibility - specially when the elements are analysed with the ICP-AES method, and the single replicate analysis of peat material by ICP-MS after a sodium pyrophosphate leach suggests a very good reproducibility.

10) Appendix XIX - Water Chemistry: For the water cations analysed by direct ICP-MS, the precision is very good for most elements, particularly for Li, Cu, Rb, Sr, Ba, La and Ce (<±5%). This method is less effective for B, Ni, As, Sm, Pb and Th (>±15%), although concentrations are very close to the lower detection limits for those elements. Most variance ratios are higher than 3 (except for B and Sm) hence the data variability is generally much higher than the analytical error. For the Hg determination by HYD-ICP-MS, the precision is fair (±26%) but the variance ratio is higher than 3 and the Hg levels for the replicate pairs are very low, suggesting the analytical precision is acceptable. The precision for the anions determinations with the high-performance IC is excellent (<±3%).

11) Appendix XX - Lithogeochemistry: For the lithogeochemistry (trace elements, major and minor oxides), there is no sufficient replicate analysis to calculate the precision but the available results suggest a fairly good reproducibility for all determinations.

Analytical accuracy was assessed by including GSC in-house control reference samples with the laboratory samples. In every analytical batch, 2-5% standard samples were generally included. In-house analytical standards (i.e., TCA 8010, 3408 std) are monitored and maintained by Terrain Sciences Division to ensure accuracy of data reported by the commercial laboratories. Other standards used include those sample sets of lake sediment and till produced by the GSC and marketed by the CANMET as part of the Canadian Certified Reference Materials Project (i.e., LKSD-4, TILL-1, TILL-2, TILL-3, TILL-4, RTS-1), in-house Agriculture and Agrifoods Canada standards (ECSS-2, ECSS-4), the pine standard (NLST certified), as well as in-house Analytical Development Laboratory water standard (OTT-96) and NRC Certified Reference material water standard (SLRS-3). The mean of values from previous analysis (<5 years) or the certified analysis can be compared with the Kaminak results (Appendix XXIIc). Results show that the accuracy is generally acceptable for all elements and for all methods as the Kaminak values are fairly close to the accepted standard analysis. Exceptions include all determinations for ECSS-4 because of the lack of a significant number of results for this standard, Ba concentrations by ICP-AES (aqua regia leach) and most elements determined by ICP-MS after a hot hydroxylamine leach.

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Appendix I
Field Stations

Note:
UTM locations recorded with NAD27 datum.
Copies of photos (slides) available upon request to Isabelle McMartin, Geological Survey of Canada.

Appendix I: Field Stations

Station ID	Easting	Northing	UTM zone	NTS	Date	Site name	Photo	Iceflow Recorded	Sample Collected	Description
97MITE-1	388149	6913294	15	55L/6	17/06/97	TRANSECT 1 - PROFILE			X	Across from small lake.
97MITE-2	389326	6912075	15	55L/6	17/06/97	TRANSECT 1 - PROFILE	X		X	200m from Hurwitz Group ridge.
97MITE-3	390102	6911081	15	55L/6	19/06/97	TRANSECT 1 - PROFILE	X		X	Gently sloping terrain towards SE.
97MITE-4	390745	6910178	15	55L/6	19/06/97	TRANSECT 1 - PROFILE	X		X	Base of frost shattered quartzite outcrop.
97MITE-5	391464	6909375	15	55L/6	19/06/97	TRANSECT 1 - PROFILE			X	Up from marine terrace.
97MITE-6	392286	6908555	15	55L/6	23/06/97	TRANSECT 1 - PROFILE	X		X	Surface gently sloping to east; fairly drained terrain.
97MITE-7	392921	6907769	15	55L/6	23/06/97	TRANSECT 1 - PROFILE	X		X	Flat area NW of small lake.
97MITE-8	393721	6906996	15	55L/6	23/06/97	TRANSECT 1 - PROFILE	X		X	Flat area.
97MITE-9	394512	6906204	15	55L/6	23/06/97	TRANSECT 1 - PROFILE	X		X	Weathered Fe in nearby mafic volcanics with pyrite grains.
97MITE-10	395217	6905369	15	55L/6	02/07/97	TRANSECT 1 - PROFILE	X		X	Gently sloping to the east into a lake.
97MITE-A	389500	6911539	15	55L/6	19/06/97	TRANSECT 1			X	On quartzite frost-shattered outcrop.
97MITE-B	390237	6910960	15	55L/6	19/06/97	TRANSECT 1			X	Small marine terrace about 150m from bedrock ridge.
97MITE-C	390567	6910751	15	55L/6	19/06/97	TRANSECT 1			X	Between two small bedrock ridges.
97MITE-D	392036	6908819	15	55L/6	23/06/97	TRANSECT 1		X	X	On roches moutonnées within felsic volcanic unit.
97MITE-E	379569	6909418	15	55L/6	07/07/97	NW KAMINAK L.			X	SE of ridge on flat surface.
97MITE-F	380429	6908638	15	55L/6	07/07/97	NW KAMINAK L.			X	Gently sloping surface towards a beach.
97MITE-G	380484	6908190	15	55L/6	07/07/97	NW KAMINAK L.			X	Gently sloping surface towards lake.
97MITE-H	403250	6914400	15	55L/7	09/07/97	FERGUSON R.		X	X	10m down-ice from bedrock ridge; gently sloping terrain towards lake.
97MITE-I	374031	6900295	15	55L/3	12/07/97	W. KAMINAK L.			X	Gently sloping terrain towards lake.
97MITE-J	375392	6899236	15	55L/3	12/07/97	W. KAMINAK L.		X	X	10m east of outcrops with Fe formations.
97MITE-K	376942	6897863	15	55L/3	12/07/97	W. KAMINAK L.			X	Relatively flat surface 400m from Kaminak Lake.
97MITE-L	395439	6905273	15	55L/6	02/07/97	TRANSECT 1			X	Lake water, Kaminak Lake, rocky shore.
97MITE-M	394995	6905932	15	55L/6	02/07/97	TRANSECT 1			X	Lake water, Kaminak Lake, bouldery shore, in small bay.
97MITE-N	394779	6905884	15	55L/6	02/07/97	TRANSECT 1			X	Lake water, small lake on SE point, sample taken near roches moutonnées in lake.
97MITE-O	394212	6906528	15	55L/6	02/07/97	TRANSECT 1			X	Lake water, small lake between sites 8 and 9, along rocky shore.
97MITE-P	393210	6907571	15	55L/6	02/07/97	TRANSECT 1			X	Lake water, smal lake, grassy shore, some till also, in between sites 7 and 8.
97MITE-Q	394406	6906787	15	55L/6	02/07/97	TRANSECT 1			X	Lake water, Kaminak Lake, along bouldery shore.
97MITE-R	391235	6909113	15	55L/6	11/07/97	TRANSECT 1			X	Lake water, small lake, along bouldery shore.
97MITE-S	392071	6908333	15	55L/6	11/07/97	TRANSECT 1			X	Lake water, small lake along bouldery-organic rich shore.
97MITE-T	392860	6909732	15	55L/6	11/07/97	TRANSECT 1			X	Lake water, Kaminak Lake, bouldery shore; small stream nearby.
97MITE-U	391400	6911650	15	55L/6	11/07/97	TRANSECT 1			X	Lake water, small lake along bouldery shore up-ice from ridge.
97MITE-V	392532	6912008	15	55L/6	11/07/97	TRANSECT 1			X	Lake water, Kaminak Lake along sandy-bouldery shore.
97MITE-W	379420	6909633	15	55L/6	07/07/97	NW KAMINAK L.			X	Lake water, Kaminak Lake along north shore of point.
97MITE-X	380270	6908896	15	55L/6	07/07/97	NW KAMINAK L.			X	Lake water, Kaminak Lake along sandy beach south of ridge.
97MITE-Y	380415	6908099	15	55L/6	07/07/97	NW KAMINAK L.			X	Lake water, Kaminak Lake on bouldery shore, nearby till sample site.
97MITE-Z	393450	6907300	15	55L/6	03/07/97	TRANSECT 1			X	In between 97MITE-7 and -8.
97MITE-AA	405200	6915700	15	55L/7	09/07/97	FERGUSON R.			X	Near the river.
97MITE-AB	405300	6915500	15	55L/7	09/07/97	FERGUSON R.			X	Near the river.
97MITE-AC	392834	6908959	15	55L/6	11/07/97	TRANSECT 1			X	Gossan.
97MITE-AD	375208	6899324	15	55L/3	12/07/97	W. KAMINAK L.			X	Near 97MITE-J.
MOB970001	345200	6879900	15	55L/4	12/06/97	SW KAMINAK S.		X		Roches moutonnées, grooves and striae.
MOB970002	351800	6883200	15	55L/4	12/06/97	SPI LAKE		X		Along small lake, nicely polished, striated roches moutonnées sloping into lake.
MOB970003	345150	6900700	15	55L/4	12/06/97	SW KAMINAK S.		X		Deep striae and roches moutonnees, not very well preserved.
MOB970004	357400	6904000	15	55L/4	12/06/97	SW KAMINAK S.	X	X		Small flat fluted outcrop along shore. Chatter marks showing ice flow towards SE.
MOB970005	360300	6895250	15	55L/4	12/06/97	CARR LAKE		X		Granites, coarse, striated surface on other side of river. Microstriae on quartz.
MOB970006	370500	6899500	15	55L/3	12/06/97	SW KAMINAK S.		X		Fine grained metavolcanics on edge of lake.
MOB970007	363125	6890750	15	55L/4	12/06/97	CARR LAKE		X		Deep striae along shore, good, constant.
MOB970008	369375	6887600	15	55L/3	12/06/97	SW KAMINAK S.		X		Deep, constant striae along shore.
MOB970009	369750	6881700	15	55L/3	12/06/97	SW KAMINAK S.		X		Preserved in lee-side of small 20cm crag.
MOB970010	364700	6881750	15	55L/4	12/06/97	CARR LAKE		X		Metavolcanics, striae, fine.
MOB970011	371513	6907917	15	55L/7	14/06/97	NW KAMINAK L.		X		Dominant roche moutonnee, striae deep and fine, microstriae.
MOB970012	370872	6911997	15	55L/7	14/06/97	SW KAMINAK S.		X		Dominant roches moutonnees, deep and fine striae, crescentic gouges, chatter marks.
MOB970013	359500	6911747	15	55L/8	14/06/97	SW KAMINAK S.		X		Nicely defined along flat outcrop coming out of lake.
MOB970014	352805	6911314	15	55L/6	14/06/97	SW KAMINAK S.		X		Main striae, deep.
MOB970016	348910	6925802	15	55L/8	14/06/97	W KAMINAK S.		X		Coarse, deep striae on granitoid.

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Station ID	Easting	Northing	UTM zone	NTS	Date	Site name	Photo	Iceflow Recorded	Sample Collected	Description
MOB970017	350740	6933007	15	55L/8	14/06/97	W KAMINAK S.		X		Fine striae in small dry creek, very constant on recently exposed granite.
MOB970018	351857	6939187	15	55L/12	14/06/97	W KAMINAK S.	X	X		Dominant roches moutonnees, deep striae.
MOB970022	374413	6931001	15	55L/6	14/06/97	O'NEIL LAKE	X	X		Deep striae and microstriae.
MOB970035	377242	6938217	15	55L/11	15/06/97	VICTORY LAKE		X		Fairly deep striae, poor outcr[illegible]
MOB970043	352072	6894893	15	55L/4	15/06/97	CARR LAKE		X		Bedrock along river.
MOB970123	403327	6906039	15	55L/6	03/07/97	NW KAMINAK L.		X		On island, stoss-main.
MOB970129	426929	6935932	15	55L/9	03/07/97	NE KAMINAK S.		X		Dominant,deep striae along shore.
MOB970131	416061	6929233	15	55L/6	03/07/97	NE KAMINAK S.		X		All along shore.
MOB970132	441452	6927191	15	55L/5	05/07/97	NE KAMINAK S.		X		Beautiful consistent crescentic gouges on pillowed mafic rocks.
MOB970133	434685	6914489	15	55L/5	05/07/97	SNUG LAKE	X	X		Main, preserved beautiful striae.
MOB970134	446970	6910255	15	55L/5	05/07/97	E KAMINAK S.		X		Rogen moraine area.
MOB970135	440892	6891010	15	55L/1	05/07/97	SE KAMINAK S.		X		Along shore, well preserved, deep striae.
MOB970136	443143	6883484	15	55L/1	05/07/97	COPPERNEEDLE R.	X	X		Main and last.
MOB970137	435409	6879895	15	55L/1	05/07/97	SE KAMINAK S.	X	X		Deep striae along shore.
MOB970138	425401	6883490	15	55L/1	05/07/97	SE KAMINAK S.		X		Large groove.
MOB970139	426550	6895908	15	55L/1	05/07/97	SE KAMINAK S.		X		Deep groove and striae on SW side.
MOB970140	428640	6901345	15	55L/1	05/07/97	SOUTHERN LAKE		X		Deep striae.
MOB970141	422118	6910329	15	55L/5	05/07/97	QUARTZITE LAKE		X		Quartzite Lake.
MOB970142	421947	6917657	15	55L/6	05/07/97	QUARTZITE LAKE		X		Main on north shore of island.
MOB970143	405358	6907850	15	55L/7	06/07/97	NE KAMINAK L.	X	X		Beautiful water-erosion forms along lake shore; on volcanics.
MOB970144	407586	6905037	15	55L/7	06/07/97	NE KAMINAK L.		X		Large groove and striae.
MOB970145	412944	6907323	15	55L/7	06/07/97	NE KAMINAK L.	X	X		On granitoids. Roches moutonnées in lake.
MOB970146	409922	6901621	15	55L/2	06/07/97	NE KAMINAK L.		X		On small island in middle of bay. Lots of pillowed volcanics.
MOB970147	407368	6901648	15	55L/2	06/07/97	NE KAMINAK L.		X		Main on tip of rocky point.
MOB970148	403456	6903040	15	55L/2	06/07/97	NE KAMINAK L.		X		Main, constant and deep striae and grooves.
MOB970149	398423	6903043	15	55L/2	06/07/97	NE KAMINAK L.		X		Deep, main and roches moutonnées.
MOB970150	397724	6907278	15	55L/7	06/07/97	NE KAMINAK L.		X		Deep striae on flat surfaces.
MOB970151	402573	6908827	15	55L/7	06/07/97	NE KAMINAK L.		X		On small island.
MOB970152	409561	6935260	15	55L/11	07/07/97	N KAMINAK S.		X		Along shore of small lake.
MOB970153	399240	6937446	15	55L/11	07/07/97	N KAMINAK S.		X		Striae, deep and fine.
MOB970154	391047	6933785	15	55L/11	07/07/97	N KAMINAK S.		X		Main and constant.
MOB970155	388028	6920174	15	55L/7	07/07/97	O'NEIL LAKE		X		Deep and constant striae.
MOB970156	380111	6920953	15	55L/7	07/07/97	SAVAGE LAKE		X	X	Beautiful deep striae.
MOB970157	380207	6909112	15	55L/7	07/07/97	NW KAMINAK L.		X	X	Along nice sandy beach.
MOB970158	397657	6895685	15	55L/2	08/07/97	SE KAMINAK L.		X		Striae, deep.
MOB970159	388470	6903722	15	55L/7	08/07/97	N KAMINAK L.		X		Very nicely striated surfaces, all on NE side of island.
MOB970160	388197	6896136	15	55L/3	08/07/97	N KAMINAK L.	X	X		Nice deep, fine striae.
MOB970161	377476	6898230	15	55L/3	08/07/97	W KAMINAK L.		X		Main.
MOB970162	381077	6890809	15	55L/3	08/07/97	W KAMINAK L.		X		Striae, fine striae.
MOB970163	382358	6884337	15	55L/3	08/07/97	W KAMINAK L.		X		Striae.
MOB970164	395875	6884348	15	55L/2	08/07/97	SE KAMINAK L.		X		Striae, protected in large groove.
MOB970165	396185	6876325	15	55L/2	08/07/97	S KAMINAK S.		X		Main. Microstriae, deep striae.
MOB970166	410491	6878916	15	55L/2	08/07/97	S KAMINAK S.		X		Deep striae on stoss side of roches moutonnées.
MOB970167	419376	6876195	15	55L/2	08/07/97	SE KAMINAK S.		X		On small island in lake.
MOB970168	410191	6888993	15	55L/2	08/07/97	SE KAMINAK S.		X		Deep striae along shore, crescentic gouges.
MOB970169	418029	6900373	15	55L/2	08/07/97	SE KAMINAK S.		X		Nice microstriae, preserved.
MOB970170	404850	6912800	15	55L/7	09/07/97	NE KAMINAK L.		X		Small island in northern Kaminak Lake.
MOB970171	409250	6914250	15	55L/7	09/07/97	NE KAMINAK L.		X		Striae on small island.
MOB970172	405750	6915650	15	55L/7	09/07/97	FERGUSON R.		X	X	On west side of the river.
MOB970173	398150	6912475	15	55L/7	09/07/97	NE KAMINAK L.		X		Preserved striae on small island.
MOB970175	392260	6909540	15	55L/6	11/07/97	NE KAMINAK L.		X	X	Outcrop where gossan is, only small rusty vein.
MOB970176	415054	6921426	15	55L/6	12/07/97	QUARTZITE LAKE		X	X	Quartzite Lake.
MOB970177	409379	6923395	15	55L/6	12/07/97	N KAMINAK S.		X		Small island.
MOB970178	399995	6930181	15	55L/6	12/07/97	N KAMINAK S		X		Striae, deep grooves.
MOB970179	402270	6923443	15	55L/6	12/07/97	FERGUSON R.		X		25m up from river, constant, deep, fine striae.

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Station ID	Easting	Northing	UTM zone	NTS	Date	Site name	Photo	Iceflow Recorded	Sample Collected	Description
MOB970180	405200	6909050	15	55L/6	13/07/97	NE KAMINAK L.		X		Striae, roches moutonnées.
MOB970377	374473	6899929	15	55L/3	12/07/97	W KAMINAK L.		X	X	Near 97MITE-I.
MOB970378	388250	6912900	15	55L/6	17/06/97	TRANSECT 1		X		Near 97MITE-1.
MOB970379	389250	6912150	15	55L/6	17/06/97	TRANSECT 1		X		Near 97MITE-2.
MOB970380	391275	6909650	15	55L/6	19/06/97	TRANSECT 1		X	X	Near 97MITE-5.
MOB970381	394406	6906787	15	55L/6	23/06/97	TRANSECT 1		X		Near 97MITE-8 along Kaminak Lake shore.
MOB970382	394300	6906200	15	55L/6	23/06/97	TRANSECT 1		X		Near 97MITE-9.
MOB970383	394750	6906450	15	55L/6	23/06/97	TRANSECT 1		X		Near 97MITE-9 along Kaminak Lake shore.
MOB970384	394850	6905750	15	55L/6	02/07/97	TRANSECT 1		X		In between 97MITE-9 and -10.
MOB970385	395300	6905380	15	55L/6	02/07/97	TRANSECT 1		X		Near 97MITE-10 along Kaminak Lake shore.
MOB990164	404026	6916661	15	55L/7	11/08/99	TRANSECT 2			X	Immediately up-ice from Hurwitz on high, rounded surface; some boulders & mudboils.
MOB990165	404454	6915898	15	55L/7	11/08/99	TRANSECT 2			X	20m from lake shore, mudboils with lots of clasts on top.
MOB990166	405045	6914929	15	55L/7	11/08/99	TRANSECT 2			X	Till surface near shore, down-ice from shales
MOB990167	402005	6914817	15	55L/7	11/08/99	TRANSECT 2 - PROFILE			X	Thick organic cover over till, some mudboils, where high Hg levels recorded by Shilts.
MOB990168	405610	6914374	15	55L/7	11/08/99	TRANSECT 2			X	On island, eastern tip where some mudboils are.
MOB990169	407108	6913055	15	55L/7	11/08/99	TRANSECT 2			X	Rusty-gossanous till, evidence of drill-hole.
MOB990170	408214	6911942	15	55L/7	11/08/99	TRANSECT 2		X	X	Flat mudboil surface with lots of bushes, lee-side of small outcrop - 15m from shore of sm lake.
MOB990171	408931	6911230	15	55L/7	11/08/99	TRANSECT 2			X	Bushy till terrain; few mudboils.
MOB990172	409839	6910689	15	55L/7	11/08/99	TRANSECT 2			X	Bushy terrain, not many mudboils, lots of frost-heaved metasediments.
MOB990173	410937	6909473	15	55L/7	11/08/99	TRANSECT 2			X	Flat mudboil area, south of lake - outcrop (flat) nearby.
MOB990174	350895	6883517	15	55L/4	12/08/99	SPI LAKE			X	Island 'A' nearby, boulder with pyrotite, felsic to intermediate volcanics.
MOB990175	349732	6884943	15	55L/4	12/08/99	SPI LAKE - PROFILE		X	X	15m down-ice from main zone - in flat mudboil area between roches moutonnées.
MOB990176	350750	6884039	15	55L/4	12/08/99	SPI LAKE		X	X	Island 'B', southern tip.
MOB990177	351670	6882871	15	55L/4	12/08/99	SPI LAKE		X	X	Flat bushy area with no fresh mudboil. No sulphide boulders on surface.
MOB990178	349262	6885450	15	55L/4	12/08/99	SPI LAKE	X	X	X	On lee-side of crag tail. SW side is the gossan (north zone). 25m down from base of an outcrop.
MOB990179	421097	6936957	15	55L/10	13/08/99	HAPPY LAKE			X	Near assay 0002, pyrite and pyrotite minerals, lots of small sulphide showings around, very little till, some sulphide boulders nearby mudboil.
MOB990180	421422	6937243	15	55L/10	13/08/99	HAPPY LAKE	X	X	X	Assay 0202 - pyrite, chalco, sphalenite, linear gossan and gossanous till. Lots of mineralized boulders lying around - probably blasted or man-made disturbance.
MOB990181	422725	6935968	15	55L/10	13/08/99	HAPPY LAKE		X	X	Assay 0182, pyrite, chalcopyrite, corellite, linear gossans cross-cutting each other, lots of trenches, few drill-holes. Very little till in this upland, beach-rounded cobbles.
MOB990182	421700	6935690	15	55L/10	13/08/93	HAPPY LAKE - PROFILE	X	X	X	Near assay 0119, pyrite, pyorotite, chalcopyrite. Nearby drill-hole, trenches along gossan. Deep, constant striae.
MOB990183	421631	6935331	15	55L/10	13/08/99	HAPPY LAKE		X		Preserved deep striae on stoss side of roche moutonnées. Other striae along shore.
MOB990184	381901	6897219	15	55L/3	14/08/99	KAMINAK L.			X	Lake water.
MOB990185	377242	6897496	15	55L/3	14/08/99	KAMINAK L.			X	Lake water.
MOB990186	377190	6901086	15	55L/3	14/08/99	KAMINAK L.	X		X	Peaty-area, hummocks, nearby narrow bay.
MOB990187	377719	6905809	15	55L/6	14/08/99	KAMINAK L.	X		X	Dry peat area, small hummocky ridge forming ice wedge.
MOB990188	374867	6909606	15	55L/6	14/08/99	KAMINAK L.			X	Lake water.
MOB990189	377381	6914460	15	55L/6	14/08/99	KAMINAK L.	X		X	Mossy peat along edge of lake. Large peat hummock, almost plateau.
MOB990190	382543	6910120	15	55L/6	14/08/99	KAMINAK L.	X		X	Small hummocks with grass on top. Flat terrain, 30m from shore.
MOB990191	380427	6907992	15	55L/6	14/08/99	KAMINAK L.			X	Lake water.
MOB990192	387667	6911517	15	55L/6	14/08/99	KAMINAK L.	X		X	Gently sloping peaty terrain towards the south. Sandy beaches.
MOB990193	389586	6908195	15	55L/6	14/08/99	KAMINAK L.			X	Lake water.
MOB990194	392839	6909777	15	55L/6	14/08/99	KAMINAK L.			X	Lake water.
MOB990195	395400	6905248	15	55L/6	14/08/99	KAMINAK L.			X	Lake water.
MOB990196	394907	6899752	15	55L/6	14/08/99	KAMINAK L.			X	Lake water.
MOB990197	387813	6902215	15	55L/3	14/08/99	KAMINAK L.			X	Near gossan and an old minex camp.
MOB990198	390676	6895855	15	55L/3	14/08/99	KAMINAK L.		X	X	Lake water.
MOB990199	408654	6905500	15	55L/7	14/08/99	KAMINAK L.			X	Lake water and bedrock sample.
MOB990200	402332	6910418	15	55L/7	14/08/99	KAMINAK L.			X	Small mudboil area, 10m lower (NE) than MAC zone, 15m from lake shore.
MOB990201	400198	6912201	15	55L/7	14/08/99	KAMINAK L.			X	Lake water.

Appendix II
Sample Description
Part A: Till, Humus, Leaf and Peat

Note:

Type

T:	till
H:	humus
B-1:	dwarf birch leave - 1st year growth
B-2:	dwarf birch leave - 2nd year growth
P:	peat

Texture

Visually determined in the field. For more quantitative analysis, refer to Appendix XV.

Appendix IIa - Sample Description
(Till, Humus, Leaf and Peat)

SAMPLE ID	Station ID	Easting	Northing	UTM	NTS	Depth (cm)	Description	Type	Section	Munsell color (wet)	Munsell code	Texture	Bedrock	Comments
97MOB0001	97MITE-1	388149	6913294	15	55L/6	25.0	till	T	2	dark reddish gray	5YR 4/2	sandy	white granite	frozen active layer; massive; no organics incorporated
97MOB0002	97MITE-1	388149	6913294	15	55L/6	15.0	till	T	1	reddish gray	5YR 5/2	sandy	white granite	few oxidation lens; some organics; air bubbles
97MOB0003	97MITE-1	388149	6913294	15	55L/6	2.5	humus	H	0	-	-	-	white granite	bottom part contains lots of mineral matter; lots of roots
97MOB0004	97MITE-1	388149	6913294	15	55L/6	-	birch leaves	B-2		-	-	-	white granite	-
97MOB0005	97MITE-2	389326	6912075	15	55L/6	65.0	till	T	7	reddish brown	5YR 4/3	silty	white granite	till frozen or immediately above permafrost table; very wet
97MOB0006	97MITE-2	389326	6912075	15	55L/6	55.0	till	T	6	reddish brown	5YR 4/3	silty	white granite	lots of water; few completely oxidized rotten clasts
97MOB0007	97MITE-2	389326	6912075	15	55L/6	45.0	till	T	5	dark reddish brown	5YR 3/4	silty	white granite	watery; few roots
97MOB0008	97MITE-2	389326	6912075	15	55L/6	35.0	till	T	4	dark reddish brown	5YR 3/3	silty	white granite	lots of roots
97MOB0009	97MITE-2	389326	6912075	15	55L/6	25.0	till	T	3	reddish brown	5YR 4/3	silty	white granite	lots of roots
97MOB0010	97MITE-2	389326	6912075	15	55L/6	15.0	till	T	2	reddish brown	5YR 5/3	sandy	white granite	loose; probably in carapace
97MOB0011	97MITE-2	389326	6912075	15	55L/6	7.5	till	T	1	reddish gray	5YR 5/2	sandy	white granite	dry; loose; beige-red colour
97MOB0012	97MITE-2	389326	6912075	15	55L/6	4.5	humus	H	0	-	-	-	white granite	taken 1m from hole
97MOB0013	97MITE-2	389326	6912075	15	55L/6	-	birch leaves	B-2		-	-	-	white granite	-
97MOB0014	97MITE-A	389500	6911539	15	55L/6	25.0	till	T		pale brown	10YR 6/3	sandy	Hurwitz:Kinga	beige; several locally derived angular schist clasts; wet; non-calcareous; few Dubawnt clasts
97MOB0015	97MITE-3	390102	6911081	15	55L/6	45.0	till	T	5	brown	7.5YR 5/3	very gravelly	Hurwitz:Ameto	wet and loose; large clasts; lots of oxidized clasts
97MOB0016	97MITE-3	390102	6911081	15	55L/6	35.0	till	T	4	brown	7.5YR 5/3	sandy-gravelly	Hurwitz:Ameto	loose
97MOB0017	97MITE-3	390102	6911081	15	55L/6	25.0	till	T	3	brown	7.5YR 5/3	sandy	Hurwitz:Ameto	more compact; clast poor; beige; some oxidized lens; dry
97MOB0018	97MITE-3	390102	6911081	15	55L/6	15.0	till	T	2	brown	7.5YR 5/3	sandy	Hurwitz:Ameto	beige; dry; some bubbles; few roots; few oxidized strings
97MOB0019	97MITE-3	390102	6911081	15	55L/5	5.0	till	T	1	brown	7.5YR 5/3	sandy	Hurwitz:Ameto	surface till sample; no humus present; bubbles; some roots; nicely compact
97MOB0020	97MITE-3	390102	6911081	15	55L/5	3.0	humus	H	0	-	-	-	Hurwitz:Ameto	taken at edge of mudboil; nicely black and compact
97MOB0021	97MITE-3	390102	6911081	15	55L/6	-	birch leaves	B-2		-	-	-	Hurwitz:Ameto	-
97MOB0022	97MITE-3	390102	6911081	15	55L/6	-	birch leaves	B-1		-	-	-	Hurwitz:Ameto	-
97MOB0023	97MITE-B	390237	6910960	15	55L/6	25.0	till	T		reddish brown	5YR 4/4	sandy	Hurwitz:mafic volc./gabbro	red; lots of Dubawnt clasts and sub-angular schist clasts (small and big)
97MOB0024	97MITE-C	390567	6910751	15	55L/6	30.0	till	T		pinkish gray	7.5YR 6/2	sandy	Hurwitz:mafic volc./gabbro	red till; compact; non-oxidized
97MOB0025	97MITE-4	390745	6910178	15	55L/6	50.0	till	T	5	brown	10YR 5/3	sandy-silty	Hurwitz:Kinga	wet, soupy
97MOB0026	97MITE-4	390745	6910178	15	55L/6	37.5	till	T	4	brown	10YR 5/3	sandy-silty	Hurwitz:Kinga	slightly wet; some parts oxidized
97MOB0027	97MITE-4	390745	6910178	15	55L/6	25.0	till	T	3	brown	10YR 5/3	sandy-silty	Hurwitz:Kinga	partly very dry and hard or wet and loose on same horizon
97MOB0028	97MITE-4	390745	6910178	15	55L/6	15.0	till	T	2	brown	10YR 5/3	sandy-silty	Hurwitz:Kinga	dry; quite hard; slightly oxidized; bubbles; no organics
97MOB0029	97MITE-4	390745	6910178	15	55L/6	6.0	till	T	1	brown	10YR 5/3	sandy-silty	Hurwitz:Kinga	dry; hard; bubbles; organics
97MOB0030	97MITE-4	390745	6910178	15	55L/6	2.5	humus	H	0	-	-	-	Hurwitz:Kinga	on side of mudboil
97MOB0031	97MITE-4	390745	6910178	15	55L/6	-	birch leaves	B-2		-	-	-	Hurwitz:Kinga	-
97MOB0032	97MITE-4	390745	6910178	15	55L/6	-	birch leaves	B-1		-	-	-	Hurwitz:Kinga	-
97MOB0033	97MITE-5	391464	6909375	15	55L/6	55.0	till	T	6	light reddish-brown	2.5YR 6/3	sandy-clayey	mafic volcanics	saturated; sandy-clayey red
97MOB0034	97MITE-5	391464	6909375	15	55L/6	45.0	till	T	5	light reddish-brown	2.5YR 6/3	sandy-clayey	mafic volcanics	wet
97MOB0035	97MITE-5	391464	6909375	15	55L/6	35.0	till	T	4	light reddish-brown	2.5YR 6/3	clayey/sandy	mafic volcanics	till either wet, brown and clayey or dry, sandy beige
97MOB0036	97MITE-5	391464	6909375	15	55L/6	25.0	till	T	3	light reddish-brown	2.5YR 6/3	clayey/sandy	mafic volcanics	relatively wet; few roots; no bubbles
97MOB0037	97MITE-5	391464	6909375	15	55L/6	15.0	till	T	2	light reddish-brown	2.5YR 6/3	clayey/sandy	mafic volcanics	few roots
97MOB0038	97MITE-5	391464	6909375	15	55L/6	5.0	till	T	1	light reddish-brown	2.5YR 6/3	clayey/sandy	mafic volcanics	dry; somewhat oxidized; few roots
97MOB0039	97MITE-5	391464	6909375	15	55L/6	2.0	humus	H	0	-	-	-	mafic volcanics	-
97MOB0040	97MITE-5	391464	6909375	15	55L/6	-	birch leaves	B-2		-	-	-	mafic volcanics	-

Appendix IIa - Sample Description
(Till, Humus, Leaf and Peat)

SAMPLE ID	Station ID	Easting	Northing	UTM	NTS	Depth (cm)	Description	Type	Section	Munsell color (wet)	Munsell code	Texture	Bedrock	Comments
97MOB0041	97MITE-5	391464	6909375	15	55L/6	-	birch leaves	B-1		-	-	-	mafic volcanics	-
97MOB0042	97MITE-6	392286	6908555	15	55L/6	65.0	till	T	5	reddish gray	5YR 5/2	clayey-sandy	felsic volcanics	soupy at bottom; very wet
97MOB0043	97MITE-6	392286	6908555	15	55L/6	52.5	till	T	4	reddish gray	5YR 5/2	clayey-sandy	felsic volcanics	soupy; a bit more dry; some organics
97MOB0044	97MITE-6	392286	6908555	15	55L/6	37.5	till	T	3	reddish gray	5YR 5/2	clayey-sandy	felsic volcanics	wet
97MOB0045	97MITE-6	392286	6908555	15	55L/6	22.5	till	T	2	reddish gray	5YR 5/2	clayey-sandy	felsic volcanics	dry; some bubbles; strings of oxidized material; some organics
97MOB0046	97MITE-6	392286	6908555	15	55L/6	10.0	till	T	1	reddish gray	5YR 5/2	clayey-sandy	felsic volcanics	surface till sample; lots of oxidized strings; roots; bubbles
97MOB0047	97MITE-6	392286	6908555	15	55L/6	2.0	humus	H	0	-	-	-	felsic volcanics	near hole
97MOB0048	97MITE-6	392286	6908555	15	55L/6	-	birch leaves	B-2		-	-	-	felsic volcanics	-
97MOB0049	97MITE-6	392286	6908555	15	55L/6	-	birch leaves	B-1		-	-	-	felsic volcanics	-
97MOB0050	97MITE-7	392921	6907769	15	55L/6	60.0	till	T	5	brown	7.5YR 5/3	sandy-clayey	mafic/felsic volcanics	wet, red till; soupy
97MOB0051	97MITE-7	392921	6907769	15	55L/6	52.5	till	T	4	brown	7.5YR 5/3	sandy-clayey	mafic/felsic volcanics	wet, red till; some roots
97MOB0052	97MITE-7	392921	6907769	15	55L/6	37.5	till	T	3	brown	7.5YR 5/3	sandy-clayey	mafic/felsic volcanics	red till; lots of organics (sedges)
97MOB0053	97MITE-7	392921	6907769	15	55L/6	22.5	till	T	2	brown	7.5YR 5/3	sandy-clayey	mafic/felsic volcanics	red till; organics; oxidized lens
97MOB0054	97MITE-7	392921	6907769	15	55L/6	10.0	till	T	1	brown	7.5YR 5/3	sandy-clayey	mafic/felsic volcanics	dry till; bubbles; organics; oxidized strings; quite rusty
97MOB0055	97MITE-7	392921	6907769	15	55L/6	4.0	humus	H	0	-	-	-	mafic/felsic volcanics	mainly moss and some sphagnum
97MOB0056	97MITE-7	392921	6907769	15	55L/6	-	birch leaves	B-2		-	-	-	mafic/felsic volcanics	-
97MOB0057	97MITE-7	392921	6907769	15	55L/6	-	birch leaves	B-1		-	-	-	mafic/felsic volcanics	-
97MOB0058	97MITE-8	393721	6906996	15	55L/6	57.5	till	T	5	pinkish gray	7.5YR 6/2	sandy	mafic/felsic volcanics	beige; water coming into hole (water table), otherwise very hard
97MOB0059	97MITE-8	393721	6906996	15	55L/6	42.5	till	T	4	pinkish gray	7.5YR 6/2	sandy	mafic/felsic volcanics	beige; dry
97MOB0060	97MITE-8	393721	6906996	15	55L/6	30.0	till	T	3	pinkish gray	7.5YR 6/2	sandy	mafic/felsic volcanics	beige; dry; hard
97MOB0061	97MITE-8	393721	6906996	15	55L/6	20.0	till	T	2	pinkish gray	7.5YR 6/2	sandy	mafic/felsic volcanics	beige; dry; few bubbles; some roots
97MOB0062	97MITE-8	393721	6906996	15	55L/6	10.0	till	T	1	pinkish gray	7.5YR 6/2	sandy	mafic/felsic volcanics	beige; dry; some roots; slightly oxidized; bubbles
97MOB0063	97MITE-8	393721	6906996	15	55L/6	4.0	humus	H	0	-	-	-	mafic/felsic volcanics	on side of hole
97MOB0064	97MITE-8	393721	6906996	15	55L/6	-	birch leaves	B-2		-	-	-	mafic/felsic volcanics	-
97MOB0065	97MITE-8	393721	6906996	15	55L/6	-	birch leaves	B-1		-	-	-	mafic/felsic volcanics	-
97MOB0066	97MITE-9	394512	6906204	15	55L/6	50.0	till	T	5	brown	10YR 5/3	gravelly	mafic/felsic volcanics	brown; oxidized; organics and roots
97MOB0067	97MITE-9	394512	6906204	15	55L/6	40.0	till	T	4	brown	10YR 5/3	sandy	mafic/felsic volcanics	somewhat oxidized; some roots; incorporation of organic matter
97MOB0068	97MITE-9	394512	6906204	15	55L/6	30.0	till	T	3	brown	10YR 5/3	sandy	mafic/felsic volcanics	beige; non-oxidized; hard; bubbles
97MOB0069	97MITE-9	394512	6906204	15	55L/6	20.0	till	T	2	brown	10YR 5/3	sandy	mafic/felsic volcanics	oxidized; organics and roots
97MOB0070	97MITE-9	394512	6906204	15	55L/6	10.0	till	T	1	brown	10YR 5/3	sandy	mafic/felsic volcanics	dry; beige; slightly oxidized; some bubbles; some roots
97MOB0071	97MITE-9	394512	6906204	15	55L/6	25.0	humus	H	0	-	-	-	mafic/felsic volcanics	more like well decomposed peat on side of mudboil
97MOB0072	97MITE-9	394512	6906204	15	55L/6	-	birch leaves	B-2		-	-	-	mafic/felsic volcanics	-
97MOB0073	97MITE-9	394512	6906204	15	55L/6	-	birch leaves	B-1		-	-	-	mafic/felsic volcanics	-
97MOB0074	97MITE-10	395217	6905369	15	55L/6	70.0	till	T	7	reddish gray	5YR 5/2	sandy-clayey	mafic/felsic volcanics	till in permafrost table
97MOB0075	97MITE-10	395217	6905369	15	55L/6	60.0	till	T	6	reddish gray	5YR 5/2	sandy-clayey	mafic/felsic volcanics	till immediately above water table; relatively dry
97MOB0076	97MITE-10	395217	6905369	15	55L/6	50.0	till	T	5	reddish gray	5YR 5/2	sandy-clayey	mafic/felsic volcanics	wet; slightly oxidized
97MOB0077	97MITE-10	395217	6905369	15	55L/6	40.0	till	T	4	reddish gray	5YR 5/2	sandy-clayey	mafic/felsic volcanics	dry
97MOB0078	97MITE-10	395217	6905369	15	55L/6	30.0	till	T	3	reddish gray	5YR 5/2	sandy-clayey	mafic/felsic volcanics	dry; slightly oxidized
97MOB0079	97MITE-10	395217	6905369	15	55L/6	20.0	till	T	2	reddish gray	5YR 5/2	sandy-clayey	mafic/felsic volcanics	oxidized; roots; bubbles
97MOB0080	97MITE-10	395217	6905369	15	55L/6	10.0	till	T	1	reddish gray	5YR 5/2	sandy-clayey	mafic/felsic volcanics	oxidized; roots; bubbles
97MOB0081	97MITE-10	395217	6905369	15	55L/6	3.0	humus	H	0	-	-	-	mafic/felsic volcanics	nice dark brown organics on side of trench
97MOB0082	97MITE-10	395217	6905369	15	55L/6	-	birch leaves	B-2		-	-	-	mafic/felsic volcanics	-
97MOB0083	97MITE-10	395217	6905369	15	55L/6	-	birch leaves	B-1		-	-	-	mafic/felsic volcanics	-

Appendix IIa - Sample Description
(Till, Humus, Leaf and Peat)

SAMPLE ID	Station ID	Easting	Northing	UTM	NTS	Depth (cm)	Description	Type	Section	Munsell color (wet)	Munsell code	Texture	Bedrock	Comments
97MOB0084	97MITE-E	379569	6909418	15	55L/6	30.0	till	T		reddish brown	5YR 4/4	clayey	Hurwitz:mafic volc./gabbro	immediately SE of ridge on flat surface with mudboils; some oxidation; sorting on top (hard gray sandy carapace; few roots on surface)
97MOB0085	97MITE-F	380429	6908638	15	55L/6	30.0	till	T		light brown	7.5YR 6/3	sandy	Hurwitz:Kinga	light brown, somewhat pinkish; dry; on gently sloping surface towards the beach (W), mudboils all around
97MOB0086	97MITE-G	380484	6908190	15	55L/6	30.0	till	T		light reddish brown	5Y 6/3	sandy	Hurwitz:Kinga	dry with a thin carapace; gently sloping mudboil surface towards lake
97MOB0087	97MITE-H	403250	6914400	15	55L/7	35.0	till	T		brown	7.5YR 5/3	sandy	volcanics and gabbro	bouldery, oxidized, organic-rich carapace; taken in mudboils 10m from bedrock down-ice from ridge on a gently sloping terrain towards the lake; few organic rich layers; somewhat reddish colours; no shales found in till
97MOB0088	97MITE-I	374031	6900295	15	55L/3	25.0	till	T		brown	7.5YR 4/4	sandy-bouldery	mafic to interm. volcanics	gently sloping terrain towards the lake; not a fresh mudboil, some vegetation on top; few roots; oxidized colour; some organic matter in decomposition included
97MOB0089	97MITE-J	375392	6899236	15	55L/3	25.0	till	T		brown	10YR 5/3	sandy	mafic to interm. volcanics	mudboils with lots of frost heaved boulders and rounded boulders around; outcrops with iron formations are 10m to the west; non-oxidized beige till
97MOB0090	97MITE-K	376942	6897863	15	55L/3	30.0	till	T		brown	7.5YR 5/3	clayey	mafic to interm. volcanics	relatively flat surface, very gently sloping towards shore (about 400m from Kaminak Lake); mudboils with clayey red matrix; few roots still in the hole
99MOB2001	MOB990164	404026	6916661	15	55L/7	35.0	till	T	1	dark brown	7.5YR 4/2	sandy	Hurwitz:Kinga	compact and clean for first 30cm, then hit a bouldery layer; some rotten clasts and roots
99MOB2002	MOB990164	404026	6916661	15	55L/7	7.0	humus	H	0	-	-	-	Hurwitz:Kinga	poorly decomposed, beside mudboil, sedges, dwarf birches
99MOB2003	MOB990165	404454	6915898	15	55L/7	30.0	till	T	1	brown	7.5YR 5/2	sandy	Hurwitz:Ameto	30 cm down, good boil, light brown till, no roots or oxidation
99MOB2004	MOB990165	404454	6915898	15	55L/7	10.0	humus	H	0	-	-	-	Hurwitz:Ameto	good, fairly to poorly decomposed, lots of roots
99MOB2005	MOB990166	405045	6914929	15	55L/7	35.0	till	T	1	brown	7.5YR 5/4	sandy	Hurwitz:Ameto	large mudboil with high organic; somewhat red, wet, some roots
99MOB2006	MOB990166	405045	6914929	15	55L/7	15.0	humus	H	0	-	-	-	Hurwitz:Ameto	within organic rim, fairly decompose.
99MOB2007	MOB990167	402005	6914817	15	55L/7	70.0	till	T	6	black	10YR 2/1	sandy	Hurwitz:Ameto	some organic matter; sampled at base with auger; probable contamination; taken below water level
99MOB2008	MOB990167	402005	6914817	15	55L/7	50.0	till	T	5	pale brown	10YR 6/3	sandy	Hurwitz:Ameto	oxidized, not much organic matter
99MOB2009	MOB990167	402005	6914817	15	55L/7	40.0	till	T	4	grayish brown	10YR 5/2	sandy	Hurwitz:Ameto	some organic matter and sand
99MOB2010	MOB990167	402005	6914817	15	55L/7	30.0	till	T	3	dark brown	1 0YR 3/3	sandy	Hurwitz:Ameto	some organic matter, sand, and roots
99MOB2011	MOB990167	402005	6914817	15	55L/7	20.0	till	T	2	brown	7.5YR 5/2	sandy	Hurwitz:Ameto	some pebbles and roots
99MOB2012	MOB990167	402005	6914817	15	55L/7	10.0	till	T	1	light brownish gray	10YR 6/2	sandy	Hurwitz:Ameto	some roots, oxidized
99MOB2013	MOB990167	402005	6914817	15	55L/7	5.0	humus	H	0	-	-	-	Hurwitz:Ameto	on top of till

Appendix IIa - Sample Description
(Till, Humus, Leaf and Peat)

SAMPLE ID	Station ID	Easting	Northing	UTM	NTS	Depth (cm)	Description	Type	Section	Munsell color (wet)	Munsell code	Texture	Bedrock	Comments
99MOB2014	MOB990167	402005	6914817	15	55L/7	30.0	till	T		brown	7.5YR 3/4	sandy	Hurwitz Amelo	no oxidation, no organics, light brown, somewhat reddish; clasts sub-angular, metasediments / volcanics
99MOB2015	MOB990168	405610	6914374	15	55L/7	35.0	till	T	1	pinkish gray	5YR 6/2	sandy-silty	Hurwitz Kinga	light reddish brown till, hard crust for first 10cm; Dubawnts, metasediments and metavolcanics
99MOB2016	MOB990168	405610	6914374	15	55L/7	15.0	humus	H	0	-	-	-	Hurwitz Kinga	some mineral matter, sedges, grass, moss, birches, dwarf birches
99MOB2017	MOB990169	407108	6913055	15	55L/7	35.0	till	T	1	dark brown	7.5YR 3/4	sandy	mafic to interm. volcanics	rusty-oxidized sandy till, clasts are almost all sub-angular
99MOB2018	MOB990169	407108	6913055	15	55L/7	20.0	humus	H	0	-	-	-	mafic to interm. volcanics	25cm thick, beautiful humus nearby mudboil; well decomposed at base
99MOB2019	MOB990170	408214	6911942	15	55L/7	35.0	till	T	1	brown	7.5YR 5/2	sandy	felsic volcanics	light brown, somewhat loose till; a few small roots but no oxidation; clasts are mainly sub-rounded granitoids
99MOB2020	MOB990170	408214	6911942	15	55L/7	20.0	humus	H	0	-	-	-	felsic volcanics	fairly decomposed
99MOB2021	MOB990171	408931	6911230	15	55L/7	35.0	till	T	1	dark reddish gray	5YR 6/2	sandy	felsic volcanics	light brown till, somewhat loose, very few roots, few Dubawnts, a bit of organic matter
99MOB2022	MOB990171	408931	6911230	15	55L/7	5.0	humus	H	0	-	-	-	felsic volcanics	taken in hummock beside mudboil; lots of willow and birch trees
99MOB2023	MOB990172	409839	6910689	15	55L/7	20.0	till	T	1	brown	10YR 5/3	gravelly	metasediments	light brown, pebbly coarse till; mainly angular, frost-heaved clasts of bedded, laminated metasediments; oxidized a bit, few roots
99MOB2024	MOB990172	409839	6910689	15	55L/7	15.0	humus	H	0	-	-	-	metasediments	peaty, light brown, in hummock.
99MOB2025	MOB990173	410937	6909473	15	55L/7	35.0	till	T	1	brown	7.5YR 5/2	sandy	mafic to interm. volcanics	light brown, fairly loose, few roots
99MOB2026	MOB990173	410937	6909473	15	55L/7	20.0	humus	H	0	-	-	-	mafic to interm. volcanics	on hummock
99MOB2027	MOB990174	350895	6883517	15	55L/4	35.0	till	T	1	pale brown	10YR 6/3	sandy	amphibolite	one sulphide clast
99MOB2028	MOB990174	350895	6883517	15	55L/4	20.0	peaty humus	H	0	-	-	-	amphibolite	in hummock, beside large mudboil area where till sample was taken
99MOB2029	MOB990175	349732	6884943	15	55L/4	65.0	till	T	6	dark brown	10YR 3/3	sandy	amphibolite	pebbly till above fractured bedrock, bit of oxidized clasts, few rounded granitoids
99MOB2030	MOB990175	349732	6884943	15	55L/4	55.0	till	T	5	brown	10YR 4/3	sandy	amphibolite	light brown till, below oxidized pebbly till layer with roots; sample is weathered
99MOB2031	MOB990175	349732	6884943	15	55L/4	45.0	till	T	4	grayish brown	10YR 5/2	sandy	amphibolite	light brown, somewhat oxidized in places
99MOB2032	MOB990175	349732	6884943	15	55L/4	30.0	till	T	3	grayish brown	10YR 5/2	sandy	amphibolite	light brown, unoxidized, very pebbly till; no roots, very compact
99MOB2033	MOB990175	349732	6884943	15	55L/4	20.0	till	T	2	brown	7.5YR 4/2	sandy	amphibolite	light brown till, no roots, no oxidation, very compact, some bubbles; rounded Archean and Dubawnts
99MOB2034	MOB990175	349732	6884943	15	55L/4	10.0	till	T	1	brown	7.5YR 5/2	sandy	amphibolite	light brown, fairly loose, many small roots, no apparent oxidation, bubbles
99MOB2035	MOB990175	349732	6884943	15	55L/4	5.0	peaty humus	P	0	-	-	-	amphibolite	in hummock, beside mudboil, fairly decomposed, brown

Appendix IIa - Sample Description
(Till, Humus, Leaf and Peat)

SAMPLE ID	Station ID	Easting	Northing	UTM	NTS	Depth (cm)	Description	Type	Section	Munsell color (wet)	Munsell code	Texture	Bedrock	Comments
99MOB2036	MOB990176	350750	6884039	15	55L/4	30.0	till	T	1	grayish brown	10YR 5/2	sandy	amphibolite	light brown, evidence of oxidation and reduction layers within till; Dubawnt clasts, mafic volcanics, granitoids (rounded)
99MOB2037	MOB990176	350750	6884039	15	55L/4	10.0	humus	H	0	-	-	-	amphibolite	nearby mudboil in small hummock; mainly sedges, moss, birch and willows
99MOB2038	MOB990177	351670	6882871	15	55L/4	40.0	till	T	1	brown	7.5YR4/2	silty sandy	amphibolite	sticky, light brown, a few roots in top 20cm; sub-rounded Dubawnts; no roots or oxidation
99MOB2039	MOB990177	351670	6882871	15	55L/4	10.0	humus	H	0	-	-	-	amphibolite	in nearby hummock which has grass, sedges, labrador tea, birch, blueberry overlying till; lots of roots
99MOB2040	MOB990178	349262	6885450	15	55L/4	35.0	till	T	1	brown	7.5YR 4/2	sandy	amphibolite	light brown, no oxidation, a few small roots; lots of angular mafic to intermediate volcanics, a few rounded granitoids
99MOB2041	MOB990178	349262	6885450	15	55L/4	5.0	humus	H	0	-	-	-	amphibolite	mineral rich; sample taken on small hummock, directly on till
99MOB2042	MOB990179	421097	6936957	15	55L/10	20.0	till	T	1	grayish brown	7.5YR 4/2	sandy	mafic to interm. volcanics	light brown, 2 large cobbles in hole; unoxidized, compact; abundant sub-angular volcanics
99MOB2043	MOB990179	421097	6936957	15	55L/10	15.0	humus	H	0	-	-	-	mafic to interm. volcanics	on till, nearby low crack against bedrock
99MOB2044	MOB990180	421422	6937243	15	55L/10	30.0	till	T	1	yellowish brown	10YR 4/6	sandy	mafic to interm. volcanics	rusty; mainly angular mineralized clasts - some are sub-angular
99MOB2045	MOB990180	421422	6937243	15	55L/10	20.0	humus	H	0	-	-	-	mafic to interm. volcanics	beautiful dark brown humus along gossan line, between two outcrops
99MOB2046	MOB990181	422725	6935968	15	55L/10	45.0	till	T	1	brown	10YR 5/3	sandy	mafic to interm. volcanics	slightly oxidized brown till, a few roots in places; clasts are sub-angular, local metavolcanics, a few rounded Archeans
99MOB2047	MOB990181	422725	6935968	15	55L/10	15.0	humus	H	0	-	-	-	mafic to interm. volcanics	peaty humus on hummock adjacent to hole
99MOB2048	MOB990182	421700	6935690	15	55L/10	70.0	till	T	7	brown	7.5YR 4/3	sandy	mafic to interm. volcanics	light brown till in mudboil; no sign of oxidation except in top 15cm; fairly compact
99MOB2049	MOB990182	421700	6935690	15	55L/10	60.0	till	T	6	grayish brown	10YR 5/2	sandy	mafic to interm. volcanics	very sandy
99MOB2050	MOB990182	421700	6935690	15	55L/10	50.0	till	T	5	brown	10YR 4/3	sandy	mafic to interm. volcanics	2 small roots
99MOB2051	MOB990182	421700	6935690	15	55L/10	40.0	till	T	4	grayish brown	10YR 5/2	sandy	mafic to interm. volcanics	1 small root
99MOB2052	MOB990182	421700	6935690	15	55L/10	30.0	till	T	3	brown	10YR 4/3	gravelly	mafic to interm. volcanics	pebbly-gravelly, somewhat oxidized; 1 small root
99MOB2053	MOB990182	421700	6935690	15	55L/10	20.0	till	T	2	brown	10YR 4/3	sandy	mafic to interm. volcanics	some oxidation, irregular, few tiny roots, some organic matter
99MOB2054	MOB990182	421700	6935690	15	55L/10	10.0	till	T	1	very dark grayish brown	5YR 5/2	sandy	mafic to interm. volcanics	roots, oxidized material, organic matter, bubbles, thin black moss on sides of mudboil
99MOB2055	MOB990182	421700	6935690	15	55L/10	5.0	humus	H	0	-	-	-	mafic to interm. volcanics	in nearby hummock overlying till; fairly well decomposed at base
99MOB2056	MOB990186	377190	6901086	15	55L/3	5.0	peat	P	1	-	-	-	mafic to interm. volcanics	brown; in hummock
99MOB2057	MOB990186	377190	6901086	15	55L/3	10.0	peat	P	2	-	-	-	mafic to interm. volcanics	brown; in hummock
99MOB2058	MOB990186	377190	6901086	15	55L/3	30.0	peat	P	4	-	-	-	mafic to interm. volcanics	brown; in hummock
99MOB2059	MOB990186	377190	6901086	15	55L/3	20.0	peat	P	3	-	-	-	mafic to interm. volcanics	brown; in hummock
99MOB2060	MOB990186	377190	6901086	15	55L/3	40.0	peat	P	5	-	-	-	mafic to interm. volcanics	black, fairly decomposed, some mineral matter, very dense

Appendix IIa - Sample Description
(Till, Humus, Leaf and Peat)

SAMPLE ID	Station ID	Easting	Northing	UTM	NTS	Depth (cm)	Description	Type	Section	Munsell color (wet)	Munsell code	Texture	Bedrock	Comments
99MOB2061	MOB990187	377719	6905809	15	55L/6	10.0	peat	P	1	-	-	-	mafic to interm. volcanics	in small hummocky ridge forming ice wedge; brown; removed top 2cm
99MOB2062	MOB990187	377719	6905809	15	55L/6	20.0	peat	P	2	-	-	-	mafic to interm. volcanics	in small hummocky ridge forming ice wedge; brown; quite a bit of grass
99MOB2063	MOB990187	377719	6905809	15	55L/6	30.0	peat	P	3	-	-	-	mafic to interm. volcanics	very dense peat
99MOB2064	MOB990189	377381	6914460	15	55L/6	20.0	peat	P	1	-	-	-	mafic to interm. volcanics	poorly decomposed sphagnum
99MOB2065	MOB990189	377381	6914460	15	55L/6	30.0	peat	P	2	-	-	-	mafic to interm. volcanics	brown, sphagnum rich
99MOB2066	MOB990190	382543	6910120	15	55L/6	10.0	peat	P	1	-	-	-	Hurwitz:Kinga	small hummock with grass on top; removed top 2cm
99MOB2067	MOB990190	382543	6910120	15	55L/6	20.0	peat	P	2	-	-	-	Hurwitz:Kinga	small hummock with grass on top
99MOB2068	MOB990190	382543	6910120	15	55L/6	30.0	peat	P	3	-	-	-	Hurwitz:Kinga	small hummock with grass on top; very dense and wet
99MOB2069	MOB990190	382543	6910120	15	55L/6	40.0	peat	P	4	-	-	-	Hurwitz:Kinga	small hummock with grass on top; very dense
99MOB2070	MOB990192	387667	6911517	15	55L/6	15.0	peat	P	1	-	-	-	mafic to interm. volcanics	very rooty, lots of grass; removed top 5cm
99MOB2071	MOB990192	387667	6911517	15	55L/6	25.0	peat	P	2	-	-	-	mafic to interm. volcanics	very dense
99MOB2072	MOB990192	387667	6911517	15	55L/6	35.0	peat	P	3	-	-	-	mafic to interm. volcanics	very dense, wet, compact peat
99MOB2073	MOB990197	387813	6902215	15	55L/3	35.0	till	T	1	yellowish brown	10YR 5/8	sandy	mafic to interm. volcanics	oxidation is prominent in the first 15cm, below is mixed reddish brown orange till
99MOB2074	MOB990197	387813	6902215	15	55L/3	15.0	humus	H	0	-	-	-	mafic to interm. volcanics	in hummock beside mudboil; some mineral matter
99MOB2075	MOB990200	402332	6910418	15	55L/7	35.0	till	T	1	reddish gray	5YR 5/2	sandy	mafic to interm. volcanics	light brown till, few small roots, somewhat reddish; angular metavolcanic clasts; fairly compact
99MOB2076	MOB990200	402332	6910418	15	55L/7	10.0	humus	H	0	-	-	-	mafic to interm. volcanics	in nearby hummock; brown, lots of small roots

Appendix II
Sample Description
Part B: Bedrock

Appendix IIb: Sample Description
(Bedrock)

SAMPLE ID	Station ID	Easting	Northing	UTM	NTS	Description
ROCK97-01	97MITE-A	389500	6911539	15	55L/6	quartzite bed, some ripples
ROCK97-02	97MITE-A	389500	6911539	15	55L/6	100m NW of Site A; outcrop weathered in thin shear "bedding" plane; source of chips in till
ROCK97-03	97MITE-A	389500	6911539	15	55L/6	up on moulded outcrop; tonalite/granite
ROCK97-04	97MITE-B	390237	6910960	15	55L/6	metavolcanics, mapped as gabbro by D. Irwin; greenstone belt rock on top of ridge
ROCK97-05	97MITE-C	390567	6910751	15	55L/6	rippled quartzite
ROCK97-06	MOB970380	391275	6909650	15	55L/6	metavolcanics, coarse and fine grained
ROCK97-07	97MITE-D	392036	6908819	15	55L/6	felsic volcanic, very hard and polished
ROCK97-08	97MITE-9	394512	6906204	15	55L/6	weathered iron formation in nearby mafic volcanics with pyrite grains
ROCK97-09	97MITE-Z	393450	6907300	15	55L/6	weathered iron formation; frost heaved rocks
ROCK97-10	97MITE-W	379420	6909633	15	55L/6	gabbro from Ameto on top of ridge; malachite minerals along fractures
ROCK97-11	97MITE-E	379569	6909418	15	55L/6	sulphides in quartz vein - pyrite
ROCK97-12	97MITE-AA	405200	6915700	15	55L/7	laminated siltstone from Ameto Formation
ROCK97-13	97MITE-AB	405300	6915500	15	55L/7	shales - from shearing zone - within Ameto formation
ROCK97-14	MOB970175	392550	6909800	15	55L/6	weathered sulphides and surrounding rocks
ROCK97-15	97MITE-AC	392834	6908959	15	55L/6	sulphides along quartz vein - all sorts including pyrite, chalcopyrite, galena and others in intermediate flows
ROCK97-16	MOB970176	415054	6921426	15	55L/7	mudstone shales
ROCK97-17	MOB970377	374473	6899929	15	55L/3	BIF, somewhat weathered; magnetite, a bit of sulphide (galena?); host rocks are massive to intermediate volcanics
ROCK97-18	97MITE-AD	375208	6899324	15	55L/3	iron formation, beautifully polished, not weathered; magnetite beds with chert
ROCK97-19	97MITE-J	375392	6899236	15	55L/3	BIF
ROCK99-100	-	-	-	15	55L	Ameto Fm - Happotiyik Member (sample provided by H. Sandeman)
ROCK99-169	MOB990169	407108	6913055	15	55L/7	rusty bld with sulphides
ROCK99-172	MOB990172	409839	6910689	15	55L/7	laminated metasediment
ROCK99-174	MOB990174	350895	6883517	15	55L/4	felsic to intermediate volcanic - with pyrrotite
ROCK99-175	MOB990175	349732	6884943	15	55L/4	metavolcanics at Spi Lake
ROCK99-180	MOB990180	421422	6937243	15	55L/10	mineralized angular bld
ROCK99-199	MOB990199	408654	6905500	15	55L/7	carbonatite at Kaminak Lake

Appendix II
Sample Description
Part C: Lake Water

Appendix IIc - Sample Description
(Lake water)

SAMPLE ID	Station ID	Lake	Easting	Northing	UTM	NTS
97-W1	97MITE-L	Kaminak Lake	395439	6905273	15	55L/6
97-W2	97MITE-M	Kaminak Lake	394995	6905932	15	55L/6
97-W3	97MITE-N	small unnamed lake	394779	6905884	15	55L/6
97-W4	97MITE-O	small unnamed lake	394212	6906528	15	55L/6
97-W5	97MITE-P	small unnamed lake	393210	6907571	15	55L/6
97-W6	97MITE-Q	Kaminak Lake	394406	6906787	15	55L/6
97-W7	97MITE-W	Kaminak Lake	379420	6909633	15	55L/6
97-W8	97MITE-X	Kaminak Lake	380270	6908896	15	55L/6
97-W9	97MITE-Y	Kaminak Lake	380415	6908099	15	55L/6
97-W10	97MITE-H	Kaminak Lake	403250	6914400	15	55L/7
97-W11	97MITE-R	small unnamed lake	391235	6909113	15	55L/6
97-W12	97MITE-S	small unnamed lake	392071	6908333	15	55L/6
97-W13	97MITE-T	Kaminak Lake	392860	6909732	15	55L/6
97-W14	97MITE-U	small unnamed lake	391400	6911650	15	55L/6
97-W15	97MITE-V	Kaminak Lake	392532	6912008	15	55L/6
99SPI-1	MOB990174	Spi Lake	350895	6883517	15	55L/4
99SPI-2	MOB990175	Spi Lake	349732	6884943	15	55L/4
99SPI-3	MOB990176	Spi Lake	350750	6884039	15	55L/4
99SPI-4	MOB990177	Spi Lake	351670	6882871	15	55L/4
99SPI-5	MOB990178	Spi Lake	349262	6885450	15	55L/4
99HAPPY-1	MOB990179	Happy Lake	421097	6936957	15	55L/10
99KAM-1	MOB990184	Kaminak Lake	381901	6897219	15	55L/3
99KAM-2	MOB990185	Kaminak Lake	377242	6897498	15	55L/3
99KAM-3	MOB990186	Kaminak Lake	377190	6901086	15	55L/3
99KAM-4	MOB990187	Kaminak Lake	377719	6905809	15	55L/6
99KAM-5	MOB990188	Kaminak Lake	374867	6909606	15	55L/6
99KAM-6	MOB990189	Kaminak Lake	377381	6914460	15	55L/6
99KAM-7	MOB990190	Kaminak Lake	382543	6910120	15	55L/6
99KAM-8	MOB990191	Kaminak Lake	380427	6907992	15	55L/6
99KAM-9	MOB990192	Kaminak Lake	387667	6911517	15	55L/6
99KAM-10	MOB990193	Kaminak Lake	389586	6908195	15	55L/6
99KAM-11	MOB990194	Kaminak Lake	392839	6909777	15	55L/6
99KAM-12	MOB990195	Kaminak Lake	395400	6905248	15	55L/6
99KAM-13	MOB990196	Kaminak Lake	394907	6899752	15	55L/6
99KAM-14	MOB990197	Kaminak Lake	387813	6902215	15	55L/3
99KAM-15	MOB990198	Kaminak Lake	390676	6895855	15	55L/3
99KAM-16	MOB990199	Kaminak Lake	408654	6905500	15	55L/7
99KAM-17	MOB990200	Kaminak Lake	402332	6910418	15	55L/7
99KAM-18	MOB990201	Kaminak Lake	400198	6912201	15	55L/7
99KAM-19	MOB990166	Kaminak Lake	405045	6915898	15	55L/7

Appendix III
Part: Erosional Ice Flow Indicators

Note:
From McMartin and Henderson (1999).

Angle
Azimuth of down-ice direction

Definition
1: well defined striae, grooves, crescentic gouges and fractures, chattermarks
2: poorly defined striae, grooves, etc.

Sense
The sense of movement was derived from rat tails, crescentic gouges, chattermarks, and roches moutonnées where present, or from stoss and lee topography.
1: known
2: unknown

Age
Relative ages of striated facets were interpreted based on the following criteria: a) a set located in the lee-side position relative to another is older, b) a set just touching the top parts of the outcrop will have been formed by the youngest ice movement, c) a set preserved only in depressions and other low positions is interpreted as older, and d) a deeper set (groove) is usually older than a finer set (microstriae).
0: no relative age
1: older
2: younger
3: youngest

Appendix III: Erosional Ice Flow Indicators

Station ID	Iceflow ID	Easting	Northing	UTM	Angle	Definition	Sense	Age	Comments
MOB970001	MOB970001a	345200	6879900	15	131	1	1	0	main
MOB970002	MOB970002a	351800	6883200	15	141	1	1	0	main
MOB970003	MOB970003a	345150	6900700	15	133	1	1	0	main
MOB970004	MOB970004a	357400	6904000	15	131	1	1	1	main
MOB970004	MOB970004b	357400	6904000	15	116	2	2	2	deep, faint
MOB970004	MOB970004c	357400	6904000	15	221	2	2	2	deep
MOB970005	MOB970005a	360300	6895250	15	136	1	1	0	microstriae
MOB970006	MOB970006a	370500	6899500	15	131	1	1	0	main
MOB970007	MOB970007a	363125	6890750	15	144	1	1	0	main
MOB970008	MOB970008a	369375	6887600	15	136	1	1	0	main
MOB970009	MOB970009a	369750	6881700	15	140	1	1	2	main
MOB970009	MOB970009b	369750	6881700	15	109	2	1	1	preserved
MOB970010	MOB970010a	364700	6881750	15	138	1	1	2	main
MOB970010	MOB970010b	364700	6881750	15	152	2	2	1	preserved
MOB970011	MOB970011a	371513	6907917	15	142	1	1	0	main
MOB970011	MOB970011b	371513	6907917	15	130	1	1	0	microstriae
MOB970012	MOB970012a	370872	6911997	15	136	1	1	0	main
MOB970012	MOB970012b	370872	6911997	15	150	1	1	0	deep on same surface
MOB970013	MOB970013a	359500	6911747	15	136	1	1	0	deep and fine striae
MOB970014	MOB970014a	352805	6911314	15	131	1	1	0	main, deep
MOB970016	MOB970016a	348910	6925802	15	141	1	1	0	main
MOB970017	MOB970017a	350740	6933007	15	133	1	1	0	fine, constant
MOB970018	MOB970018a	351857	6939187	15	125	1	1	2	deep, on same surface as 146
MOB970018	MOB970018b	351857	6939187	15	163	1	2	1	preserved
MOB970018	MOB970018c	351857	6939187	15	146	1	1	2	main
MOB970022	MOB970022a	374413	6931001	15	134	1	1	0	main
MOB970022	MOB970022b	374413	6931001	15	125	1	1	0	microstriae
MOB970035	MOB970035a	377242	6938217	15	148	1	1	0	deep
MOB970043	MOB970043a	352072	6894893	14	136	1	1	0	dominant
MOB970043	MOB970043b	352072	6894893	14	111	2	2	0	preserved, maybe river marks
MOB970123	MOB970123a	403327	6906039	15	133	1	1	2	main
MOB970123	MOB970123b	403327	6906039	15	176	1	2	1	preserved
MOB970129	MOB970129a	426929	6935932	15	110	1	1	0	main
MOB970131	MOB970131a	416061	6929233	15	128	1	1	2	main
MOB970131	MOB970131b	416061	6929233	15	143	1	1	1	preserved
MOB970131	MOB970131c	416061	6929233	15	103	2	1	0	deep, constant, on stoss side
MOB970132	MOB970132a	441452	6927191	15	132	1	1	2	main
MOB970132	MOB970132b	441452	6927191	15	81	2	2	1	preserved
MOB970133	MOB970133a	434685	6914489	15	123	1	1	2	main
MOB970133	MOB970133b	434685	6914489	15	167	1	1	1	preserved
MOB970133	MOB970133c	434685	6914489	15	143	2	1	1	preserved
MOB970134	MOB970134a	446970	6910255	15	139	1	1	0	groove and striae
MOB970134	MOB970134b	446970	6910255	15	109	1	1	0	fine and deep striae
MOB970135	MOB970135a	440892	6891010	15	130	1	1	3	main, last
MOB970135	MOB970135b	440892	6891010	15	148	1	1	2	preserved
MOB970135	MOB970135c	440892	6891010	15	164	1	1	1	more preserved
MOB970136	MOB970136a	443143	6883484	15	129	1	1	2	main
MOB970136	MOB970136b	443143	6883484	15	147	1	1	1	preserved
MOB970136	MOB970136c	443143	6883484	15	59	2	2	0	deep gouges
MOB970137	MOB970137a	435409	6879895	15	113	1	1	2	main
MOB970137	MOB970137b	435409	6879895	15	143	1	1	1	preserved
MOB970138	MOB970138a	425401	6883490	15	93	1	1	0	groove and striae
MOB970138	MOB970138b	425401	6883490	15	113	1	1	0	main
MOB970138	MOB970138c	425401	6883490	15	134	1	1	0	deep, somewhat preserved
MOB970139	MOB970139a	426550	6895908	15	145	1	1	1	main
MOB970139	MOB970139b	426550	6895908	15	116	1	1	2	fine
MOB970140	MOB970140a	428640	6901345	15	133	1	1	1	deep, possibly main
MOB970140	MOB970140b	428640	6901345	15	93	1	1	2	fine striae
MOB970141	MOB970141a	422118	6910329	15	143	1	1	2	main
MOB970141	MOB970141b	422118	6910329	15	166	1	1	1	preserved
MOB970141	MOB970141c	422118	6910329	15	117	1	1	1	preserved
MOB970142	MOB970142a	421947	6917657	15	148	1	1	1	deep groove and striae
MOB970142	MOB970142b	421947	6917657	15	123	1	1	2	main on north shore of island
MOB970143	MOB970143a	405358	6907850	15	147	1	1	3	main
MOB970143	MOB970143b	405358	6907850	15	117	1	1	2	preserved
MOB970143	MOB970143c	405358	6907850	15	177	1	1	1	preserved
MOB970144	MOB970144a	407586	6905037	15	175	1	1	1	preserved

Appendix III: Erosional Ice Flow Indicators

Station ID	Iceflow ID	Easting	Northing	UTM	Angle	Definition	Sense	Age	Comments
MOB970144	MOB970144b	407586	6905037	15	145	1	1	3	main
MOB970144	MOB970144c	407586	6905037	15	111	1	1	2	preserved
MOB970145	MOB970145a	412944	6907323	15	143	1	1	2	main
MOB970145	MOB970145b	412944	6907323	15	117	1	1	1	preserved
MOB970146	MOB970146a	409922	6901621	15	141	1	1	0	main
MOB970147	MOB970147a	407366	6901648	15	144	1	1	2	main
MOB970147	MOB970147b	407368	6901648	15	117	1	1	1	preserved
MOB970148	MOB970148a	403456	6903040	15	144	1	1	2	main
MOB970148	MOB970148b	403456	6903040	15	177	1	1	1	preserved
MOB970148	MOB970148c	403456	6903040	15	119	1	1	1	preserved
MOB970149	MOB970149a	398423	6903043	15	144	1	1	2	main
MOB970149	MOB970149b	398423	6903043	15	129	2	1	1	preserved
MOB970150	MOB970150a	397724	6907278	15	134	1	1	2	main
MOB970150	MOB970150b	397724	6907278	15	114	1	1	1	preserved
MOB970151	MOB970151a	402573	6908827	15	122	1	1	1	preserved
MOB970151	MOB970151b	402573	6908827	15	141	1	1	2	main
MOB970152	MOB970152a	409561	6935260	15	146	1	1	2	main
MOB970152	MOB970152b	409561	6935260	15	122	1	1	3	dominant on stoss side
MOB970152	MOB970152c	409561	6935260	15	162	1	1	1	preserved from main
MOB970153	MOB970153a	399240	6937446	15	144	1	1	1	main
MOB970153	MOB970153b	399240	6937446	15	123	1	1	2	deep and fine, last
MOB970153	MOB970153c	399240	6937446	15	114	1	1	0	deep
MOB970154	MOB970154a	391047	6933785	15	144	1	1	0	main
MOB970155	MOB970155a	388028	6920174	15	139	1	1	2	main on north part of outcrop
MOB970155	MOB970155b	388028	6920174	15	124	1	1	1	preserved from main and 95
MOB970155	MOB970155c	388028	6920174	15	95	2	1	2	fine and constant striae
MOB970156	MOB970156a	380111	6920953	15	140	1	1	2	main
MOB970156	MOB970156b	380111	6920953	15	118	1	1	1	preserved
MOB970156	MOB970156c	380111	6920953	15	165	1	1	1	preserved
MOB970157	MOB970157a	380207	6909112	15	144	1	1	2	main
MOB970157	MOB970157b	380207	6909112	15	110	1	1	1	preserved
MOB970158	MOB970158a	397657	6895685	15	142	1	1	2	main
MOB970158	MOB970158b	397657	6895685	15	154	1	1	0	deep
MOB970158	MOB970158c	397657	6895685	15	129	1	1	1	preserved
MOB970159	MOB970159a	388470	6903722	15	142	1	1	2	main
MOB970159	MOB970159b	388470	6903722	15	161	1	1	1	preserved
MOB970160	MOB970160a	388197	6896136	15	167	1	1	1	preserved
MOB970160	MOB970160b	388197	6896136	15	103	1	1	1	preserved
MOB970160	MOB970160c	388197	6896136	15	137	1	1	2	main
MOB970161	MOB970161a	377476	6898230	15	143	1	1	0	main
MOB970161	MOB970161b	377476	6898230	15	130	1	1	0	deep
MOB970162	MOB970162a	381077	6890809	15	142	1	1	2	main
MOB970162	MOB970162b	381077	6890809	15	176	1	1	1	preserved
MOB970163	MOB970163a	382358	6884337	15	138	1	1	2	main
MOB970163	MOB970163b	382358	6884337	15	130	1	1	1	preserved
MOB970164	MOB970164a	395875	6884348	15	99	1	1	1	preserved
MOB970164	MOB970164b	395875	6884348	15	137	1	1	2	main
MOB970165	MOB970165a	396185	6876325	15	146	1	1	0	main
MOB970166	MOB970166a	410491	6878916	15	143	1	1	2	main
MOB970166	MOB970166b	410491	6878916	15	161	1	1	1	possibly preserved
MOB970167	MOB970167a	419376	6876195	15	139	1	1	2	main
MOB970167	MOB970167b	419376	6876195	15	176	1	1	1	preserved
MOB970168	MOB970168a	410191	6888993	15	135	1	1	0	deep, along shore
MOB970168	MOB970168b	410191	6888993	15	143	1	1	0	deep striae and crescentic gouges
MOB970169	MOB970169a	418029	6900373	15	158	1	1	0	microstriae
MOB970169	MOB970169b	418029	6900373	15	133	1	1	0	main
MOB970170	MOB970170a	404850	6912800	15	146	1	1	1	main
MOB970170	MOB970170b	404850	6912800	15	124	1	1	2	deep and fine striae
MOB970171	MOB970171a	409250	6914250	15	150	1	1	2	main
MOB970171	MOB970171b	409250	6914250	15	124	1	1	3	deep and fine striae
MOB970171	MOB970171c	409250	6914250	15	176	1	1	1	preserved
MOB970172	MOB970172a	405750	6915650	15	149	1	1	1	main
MOB970172	MOB970172b	405750	6915650	15	111	1	1	2	present in low areas
MOB970173	MOB970173a	398150	6912475	15	137	1	1	2	main
MOB970173	MOB970173b	398150	6912475	15	111	1	1	1	preserved
MOB970173	MOB970173c	398150	6912475	15	177	1	1	1	preserved

Appendix III: Erosional Ice Flow Indicators

Station ID	Iceflow ID	Easting	Northing	UTM	Angle	Definition	Sense	Age	Comments
97MITE-H	MOB970174a	403250	6914400	15	143	1	1	0	main
MOB970175	MOB970175a	392260	6909540	15	140	1	1	0	deep
MOB970176	MOB970176a	415054	6921426	15	144	1	1	2	main, last
MOB970176	MOB970176b	415054	6921426	15	110	1	1	1	preserved, deep
MOB970176	MOB970176c	415054	6921426	15	123	1	1	3	grooves and fine striae
MOB970177	MOB970177a	409379	6923395	15	133	1	1	2	main
MOB970177	MOB970177b	409379	6923395	15	158	1	1	1	preserved
MOB970178	MOB970178a	399995	6930181	15	129	1	1	2	main
MOB970178	MOB970178b	399995	6930181	15	149	1	1	0	deep grooves
MOB970178	MOB970178c	399995	6930181	15	169	1	1	1	preserved
MOB970179	MOB970179a	402270	6923443	15	144	1	1	2	main
MOB970179	MOB970179b	402270	6923443	15	134	2	1	1	preserved
MOB970180	MOB970180a	405200	6909050	15	136	1	1	3	main
MOB970180	MOB970180b	405200	6909050	15	179	1	1	2	protected striae and roches moutonnées
MOB970180	MOB970180c	405200	6909050	15	209	2	2	1	possibly protected on lee of 179
97MITE-J	MOB970375a	375392	6899236	15	145	1	1	0	main
97MITE-D	MOB970376a	392036	6908819	15	142	1	1	0	main
MOB970377	MOB970377a	374473	6899929	15	136	1	1	0	main
MOB970378	MOB970378a	388250	6912900	15	147	1	1	0	main
MOB970379	MOB970379a	389250	6912150	15	151	1	1	0	deep
MOB970379	MOB970379b	389250	6912150	15	135	1	1	0	main
MOB970380	MOB970380a	391275	6909650	15	141	1	1	0	main
MOB970381	MOB970381a	394406	6906787	15	134	1	1	2	main
MOB970381	MOB970381b	394406	6906787	15	177	1	1	1	preserved
MOB970382	MOB970382a	394300	6906200	15	139	1	1	0	main
MOB970383	MOB970383a	394750	6906450	15	141	1	1	2	main
MOB970383	MOB970383b	394750	6906450	15	173	1	1	1	preserved
MOB970384	MOB970384a	394850	6905750	15	139	1	1	2	main
MOB970384	MOB970384b	394850	6905750	15	158	1	1	1	preserved
MOB970385	MOB970385a	395300	6905380	15	135	1	1	2	main
MOB970385	MOB970385b	395300	6905380	15	181	1	1	1	preserved
MOB990168	MOB990168a	405610	6914374	15	138	1	1	1	main
MOB990168	MOB990168b	405610	6914374	15	111	1	1	2	fine
MOB990170	MOB990170a	408214	6911942	15	128	1	1	2	recent
MOB990170	MOB990170b	408214	6911942	15	152	1	1	1	preserved
MOB990173	MOB990173a	410937	6909473	15	132	1	1	0	main
MOB990174	MOB990174a	350895	6883517	15	135	1	1	0	deep
MOB990175	MOB990175a	349732	6884943	15	135	1	1	0	main
MOB990176	MOB990176a	350750	6884039	15	135	1	1	2	main
MOB990176	MOB990176b	350750	6884039	15	154	1	1	2	on same face as 135
MOB990176	MOB990176c	350750	6884039	15	164	1	2	1	preserved, indication for both directions
MOB990180	MOB990180a	421422	6937243	15	134	1	1	0	main
MOB990181	MOB990181a	422725	6935968	15	125	1	1	0	main
MOB990183	MOB990183a	421631	6935331	15	138	1	1	1	preserved
MOB990183	MOB990183b	421631	6935331	15	124	1	1	2	main
MOB990198	MOB990198a	390676	6895855	15	147	1	1	0	main

Appendix IV
Pebble Lithological Composition of Till

Note:
Sample preparation
Wet sieve 2-4 mm range

Method
Visual determination with binocular microscope (maximum 250 pebbles), percentage calculated by weight; analysis by Consorminex Inc.

Lithologies

Dubawnt Supergroup:
1- Thelon Formation: distinctive light coloured quartz sandstone; composed largely of quartz and kaolinized feldspar grains; non calcareous.
2- Pitz Formation: red to purple felsic volcanic rock containing large chalky white feldspar and quartz phenocrysts in a fine grained groundmass; no biotite grains.
3- Undifferentiated Dubawnt clasts: includes red to pink volcanics, volcaniclastics, conglomerates, sandstones, mudstones and siltstones; Christopher Island Fm is similar to Pitz but contains no quartz and no micas, chalky color of feldspars is present on weathered surfaces only; may include Amer Group hematite rich volcanics.

Undifferentiated Kaminak/Hurwitz Groups:
4- Undifferentiated metavolcanics and metasediments: felsic volcanics and tuff, mafic volcanics and tuffs, breccias, mica schist, include gabbros, gneiss, BIF.

Hurwitz Group:
5- Kinga Formation: medium to coarse grained quartz arenite, white to pink color.
6- Ameto Formation-a: dolomite, pink to cream-tan.
7- Ameto Formation-b: argillite and siltstone, dark grey to brown.

Crystalline:
8- Undifferentiated granitoids: weakly to well foliated, pink to grey.

Appendix IV: Pebble Lithological Composition
(2-4 mm fraction)

Sample	Station ID	Easting	Northing	UTM	No. of Pebbles	Total Wt. (g)	Dubawnt Supergroup			Undif. Kam/Hurw (%)	Hurwitz Group			Granitoids (%)	Other (%)	Comments
							Thelon Fm (%)	Pitz Fm (%)	Undif. Dubawnt (%)		Kinga Fm (%)	Ameto a (%)	Ameto b (%)			
97MOB0001	97MITE-1	388149	6913294	15	250	6.73	4.61	3.71	18.87	9.66	0.00	0.00	0.00	63.15	0.00	-
97MOB0002	97MITE-1	388149	6913294	15	250	9.21	5.10	5.54	20.85	7.38	1.85	0.00	0.00	59.28	0.00	-
97MOB0005	97MITE-2	389326	6912075	15	250	9.53	2.83	0.84	19.73	13.12	0.00	0.00	0.00	63.48	0.00	-
97MOB0006	97MITE-2	389326	6912075	15	250	9.63	4.67	1.35	16.61	15.16	0.42	0.00	0.00	61.79	0.00	-
97MOB0007	97MITE-2	389326	6912075	15	250	9.25	3.46	2.81	20.22	10.70	0.86	0.00	0.00	61.95	0.00	-
97MOB0008	97MITE-2	389326	6912075	15	250	10.04	2.09	2.79	15.34	7.67	0.40	0.00	1.00	70.72	0.00	1 siltstone?
97MOB0009	97MITE-2	389326	6912075	15	250	10.32	2.52	4.07	16.86	12.79	0.39	0.00	0.00	63.37	0.00	-
97MOB0010	97MITE-2	389326	6912075	15	250	7.05	2.84	3.55	23.55	14.75	0.28	0.85	0.00	54.18	0.00	-
97MOB0011	97MITE-2	389326	6912075	15	250	8.96	1.90	3.24	22.21	14.84	0.00	0.45	0.00	57.37	0.00	-
97MOB0014	97MITE-A	389500	6911539	15	250	6.66	1.05	1.20	2.10	70.42	0.00	0.00	0.00	25.23	0.00	70% schist? altered
97MOB0015	97MITE-3	390102	6911081	15	250	10.60	4.34	1.89	25.75	8.40	0.00	0.00	0.00	59.62	0.00	-
97MOB0016	97MITE-3	390102	6911081	15	250	8.24	8.01	3.88	20.39	10.80	0.00	0.00	0.00	56.92	0.00	-
97MOB0017	97MITE-3	390102	6911081	15	250	9.58	2.19	2.09	24.01	10.65	0.42	0.00	0.00	60.65	0.00	-
97MOB0018	97MITE-3	390102	6911081	15	250	8.73	1.03	5.61	15.81	18.44	2.63	0.00	0.00	56.47	0.00	-
97MOB0019	97MITE-3	390102	6911081	15	250	7.33	4.09	6.55	12.41	14.05	0.00	0.00	0.00	62.89	0.00	-
97MOB0023	97MITE-B	390237	6910960	15	250	9.42	3.40	3.40	23.67	7.96	0.00	0.00	0.00	61.57	0.00	-
97MOB0024	97MITE-C	390567	6910751	15	250	8.95	3.02	2.23	15.53	7.37	0.00	0.00	0.00	71.84	0.00	-
97MOB0025	97MITE-4	390745	6910178	15	250	8.52	1.53	1.88	23.00	10.45	1.17	0.00	0.00	61.97	0.00	-
97MOB0026	97MITE-4	390745	6910178	15	250	9.02	2.44	1.55	24.17	8.54	0.00	0.00	0.67	62.64	0.00	-
97MOB0027	97MITE-4	390745	6910178	15	250	8.69	2.99	2.42	17.84	7.02	0.69	0.00	0.23	68.81	0.00	-
97MOB0028	97MITE-4	390745	6910178	15	250	8.07	1.36	1.86	20.07	11.28	0.00	0.00	0.37	65.06	0.00	-
97MOB0029	97MITE-4	390745	6910178	15	250	8.62	1.62	2.90	24.25	9.16	0.58	0.00	1.28	60.21	0.00	-
97MOB0033	97MITE-5	391464	6909375	15	250	9.81	3.16	1.73	17.94	11.01	0.00	0.00	0.81	65.55	0.00	-
97MOB0034	97MITE-5	391464	6909375	15	250	9.06	3.42	0.44	19.54	7.84	0.00	0.00	0.00	68.76	0.00	-
97MOB0035	97MITE-5	391464	6909375	15	250	8.66	3.12	1.73	16.28	12.82	0.69	0.00	2.08	63.28	0.00	3 laminated siltstone
97MOB0036	97MITE-5	391464	6909375	15	250	8.22	1.82	2.31	15.94	14.72	0.36	0.00	0.00	64.84	0.00	-
97MOB0037	97MITE-5	391464	6909375	15	250	8.68	4.72	0.92	18.89	14.98	0.00	0.00	0.00	60.48	0.00	-
97MOB0038	97MITE-5	391464	6909375	15	250	9.04	1.88	0.66	20.46	17.48	0.00	0.00	0.00	59.51	0.00	-
97MOB0042	97MITE-6	392286	6908555	15	250	8.04	1.37	3.11	16.29	12.19	0.25	0.00	0.00	66.79	0.00	-
97MOB0043	97MITE-6	392286	6908555	15	250	8.55	2.69	1.99	23.98	11.70	0.58	0.00	0.00	59.06	0.00	-
97MOB0044	97MITE-6	392286	6908555	15	250	8.02	1.87	2.37	19.70	10.47	0.00	0.00	0.25	65.34	0.00	-
97MOB0045	97MITE-6	392286	6908555	15	250	8.43	1.78	2.14	19.34	19.10	3.20	0.00	0.00	54.45	0.00	-
97MOB0046	97MITE-6	392286	6908555	15	250	7.25	2.62	2.90	18.48	13.24	0.55	0.00	0.00	62.21	0.00	-
97MOB0050	97MITE-7	392921	6907769	15	250	7.97	2.76	2.26	21.58	12.92	0.00	0.00	0.00	60.48	0.00	-
97MOB0051	97MITE-7	392921	6907769	15	250	7.77	1.16	1.16	20.98	8.62	0.00	0.00	0.00	68.08	0.00	-
97MOB0052	97MITE-7	392921	6907769	15	250	7.75	6.84	2.19	20.77	9.03	0.00	0.00	0.00	61.16	0.00	-
97MOB0053	97MITE-7	392921	6907769	15	250	9.17	6.00	3.27	19.19	16.25	0.76	0.00	0.00	54.53	0.00	-
97MOB0054	97MITE-7	392921	6907769	15	250	7.36	2.17	3.40	20.11	3.80	0.82	0.00	0.27	69.43	0.00	-
97MOB0058	97MITE-8	393721	6906996	15	250	9.59	2.61	1.36	23.25	7.19	0.00	0.00	0.00	65.59	0.00	-
97MOB0059	97MITE-8	393721	6906996	15	250	6.76	3.25	1.78	23.08	7.25	0.44	0.00	0.00	64.20	0.00	-
97MOB0060	97MITE-8	393721	6906996	15	250	7.76	4.64	0.39	22.81	10.70	0.00	0.00	1.03	60.44	0.00	-
97MOB0061	97MITE-8	393721	6906996	15	250	8.25	3.27	3.03	14.06	14.06	0.00	0.00	0.85	64.73	0.00	-
97MOB0062	97MITE-8	393721	6906996	15	250	9.47	3.59	4.01	19.96	9.93	0.00	0.00	0.00	62.51	0.00	-
97MOB0066	97MITE-9	394512	6906204	15	250	10.32	3.78	1.84	28.20	9.21	0.00	0.00	0.00	56.98	0.00	-
97MOB0067	97MITE-9	394512	6906204	15	250	8.31	1.08	0.24	23.71	13.48	0.00	0.00	0.00	61.49	0.00	-
97MOB0068	97MITE-9	394512	6906204	15	250	9.17	4.91	2.84	27.04	8.18	0.00	0.00	0.00	57.03	0.00	-
97MOB0069	97MITE-9	394512	6906204	15	250	9.27	5.07	1.29	27.08	6.69	0.00	0.00	0.00	59.87	0.00	-
97MOB0070	97MITE-9	394512	6906204	15	250	9.35	5.35	1.28	19.47	11.55	0.00	0.00	0.00	62.35	0.00	-
97MOB0074	97MITE-10	395217	6905369	15	250	7.66	1.04	2.09	21.02	18.02	1.83	0.00	0.00	56.01	0.00	-
97MOB0075	97MITE-10	395217	6905369	15	250	8.58	2.21	1.28	15.15	23.43	0.58	0.00	0.58	56.76	0.00	-
97MOB0076	97MITE-10	395217	6905369	15	250	8.05	3.35	0.99	20.37	14.78	0.00	0.00	0.00	60.50	0.00	-
97MOB0077	97MITE-10	395217	6905369	15	250	8.59	0.81	2.91	19.79	15.83	0.00	0.00	1.98	58.67	0.00	2 siltstone
97MOB0078	97MITE-10	395217	6905369	15	250	8.31	5.90	2.65	16.13	18.17	0.24	0.00	2.17	54.75	0.00	1 laminated siltstone
97MOB0079	97MITE-10	395217	6905369	15	250	9.01	1.33	0.55	19.42	18.20	2.55	0.00	0.00	57.94	0.00	-
97MOB0080	97MITE-10	395217	6905369	15	250	9.04	1.22	1.99	16.92	13.38	0.44	0.00	0.00	66.04	0.00	-
97MOB0084	97MITE-E	379569	6909418	15	250	8.24	3.28	1.33	16.99	16.99	1.58	0.00	0.00	59.83	0.00	-
97MOB0085	97MITE-F	380429	6908638	15	250	7.29	2.47	0.55	20.16	13.17	0.00	0.00	1.23	62.41	0.00	-

Appendix IV: Pebble Lithological Composition
(2-4 mm fraction)

Sample	Station ID	Easting	Northing	UTM	No. of Pebbles	Total Wt. (g)	Dubawnt Supergroup			Undif. Kam/Hurw (%)	Hurwitz Group			Granitoids (%)	Other (%)	Comments
							Thelon Fm (%)	Pitz Fm (%)	Undif. Dubawnt (%)		Kinga Fm (%)	Ameto a (%)	Ameto b (%)			
97MOB0086	97MITE-G	380484	6908190	15	250	9.54	2.83	0.73	28.62	11.32	0.00	0.00	0.00	56.50	0.00	-
97MOB0087	97MITE-H	403250	6914400	15	250	7.84	2.81	2.68	19.01	9.44	0.00	0.00	0.00	66.07	0.00	-
97MOB0088	97MITE-I	374031	6900295	15	250	10.50	1.81	1.05	17.24	17.90	0.00	0.00	0.00	62.00	0.00	-
97MOB0089	97MITE-J	375392	6899236	15	250	9.00	1.78	1.78	12.22	23.67	0.00	0.00	0.00	60.56	0.00	-
97MOB0090	97MITE-K	376942	6897863	15	250	8.34	1.44	2.52	14.27	15.11	0.00	0.00	0.00	66.67	0.00	-
99MOB2001	MOB990164	404026	6916661	15	250	9.14	0.00	2.95	16.41	17.40	0.00	0.00	0.00	55.58	7.66	Others: one yellow qtzite.
99MOB2003	MOB990165	404454	6915898	15	250	8.35	2.51	2.99	17.96	7.43	0.00	0.00	0.00	66.11	2.99	-
99MOB2005	MOB990166	405045	6914929	15	250	9.32	2.16	4.42	13.15	32.65	0.00	0.00	0.00	47.63	0.00	A lot of schistose, micaceous pebbles.
99MOB2007	MOB990167	402005	6914817	15	250	8.42	1.67	4.06	18.97	13.37	0.00	0.00	0.00	61.93	0.00	-
99MOB2008	MOB990167	402005	6914817	15	250	7.34	4.65	4.23	18.19	10.86	0.00	0.00	0.00	59.52	2.54	-
99MOB2009	MOB990167	402005	6914817	15	250	8.02	5.46	4.19	14.10	29.99	0.00	0.00	0.00	46.25	0.00	Kam/Hurw: special, sucrose, pink qtzite.
99MOB2010	MOB990167	402005	6914817	15	250	7.66	5.42	2.91	16.51	19.95	0.00	0.00	0.00	55.22	0.00	-
99MOB2011	MOB990167	402005	6914817	15	250	7.53	3.37	4.45	20.49	21.56	0.00	0.00	0.00	50.13	0.00	-
99MOB2012	MOB990167	402005	6914817	15	250	7.03	4.72	5.44	15.31	29.76	0.00	0.00	0.00	44.78	0.00	Several ultramafic
99MOB2014	MOB990167	402005	6914817	15	250	9.15	2.09	6.60	12.98	15.73	0.00	0.22	0.00	62.38	0.00	Granitoids: coarse grained pebbles.
99MOB2015	MOB990168	405610	6914374	15	250	8.59	4.54	5.12	8.38	24.33	0.00	0.00	0.00	57.63	0.00	-
99MOB2017	MOB990169	407108	6913055	15	250	9.39	10.79	1.28	35.68	29.81	0.00	0.00	0.00	22.44	0.00	Thelon&Dubawnt: weathered sst. w goethite cover.
99MOB2019	MOB990170	408214	6911942	15	250	9.55	4.71	3.46	9.63	24.50	0.00	0.00	0.00	57.70	0.00	-
99MOB2021	MOB990171	408931	6911230	15	250	8.70	3.83	5.34	18.23	21.02	0.00	0.23	0.00	51.34	0.00	-
99MOB2023	MOB990172	409839	6910689	15	250	5.90	1.53	0.85	1.86	6.95	0.00	0.00	0.00	8.47	80.34	Other: tan coloured schist dominates.
99MOB2025	MOB990173	410937	6909473	15	250	8.79	4.44	3.87	16.29	22.67	0.00	0.00	0.00	52.73	0.00	-
99MOB2027	MOB990174	350895	6883517	15	250	8.27	2.42	3.63	13.32	24.33	0.00	0.24	0.00	48.91	7.14	Kam/Hurw: fresh sulphides; Other: 1shale?
99MOB2029	MOB990175	349732	6884943	15	250	9.83	0.71	5.80	14.36	32.08	0.00	0.00	0.00	47.05	0.00	-
99MOB2030	MOB990175	349732	6884943	15	250	7.10	4.93	1.27	10.42	41.83	0.00	0.00	0.00	41.55	0.00	-
99MOB2031	MOB990175	349732	6884943	15	250	9.21	5.76	3.59	7.61	37.50	0.00	0.00	0.00	45.54	0.00	Kam/Hurw: a fresh volcanic; Granitoids: many may be Kam/Hurw.
99MOB2032	MOB990175	349732	6884943	15	250	8.74	1.49	2.29	12.93	40.16	0.00	0.00	0.00	43.14	0.00	A couple of nice ultramafic.
99MOB2033	MOB990175	349732	6884943	15	250	7.67	1.56	1.96	14.99	26.73	0.00	0.00	0.00	54.76	0.00	Dubawnt pebble with lithological contact .
99MOB2034	MOB990175	349732	6884943	15	250	10.36	1.93	2.42	13.15	35.01	0.00	0.00	0.00	47.49	0.00	-
99MOB2036	MOB990176	350750	6884039	15	250	8.38	2.58	0.98	17.10	26.08	0.00	0.00	0.00	53.26	0.00	-
99MOB2038	MOB990177	351670	6882871	15	250	8.02	1.38	5.02	12.17	27.60	0.00	0.00	0.00	53.83	0.00	Granitoids: distinct lithology.
99MOB2040	MOB990178	349262	6885450	15	250	8.06	1.49	1.74	12.80	48.82	0.00	0.00	0.00	35.16	0.00	Kam/Hurw: distinct lithology
99MOB2042	MOB990179	421097	6936957	15	250	7.66	2.75	3.28	9.83	49.67	0.00	0.00	0.00	34.47	0.00	-
99MOB2044	MOB990180	421422	6937243	15	250	8.04	0.00	0.00	1.50	98.50	0.00	0.00	0.00	0.00	0.00	Weathered quartzites and schists.
99MOB2046	MOB990181	422725	6935968	15	250	9.19	2.18	1.42	8.93	48.69	0.00	0.00	0.00	34.53	4.25	-
99MOB2048	MOB990182	421700	6935690	15	250	6.92	1.30	4.20	16.06	39.07	0.00	0.00	0.00	39.36	0.00	-
99MOB2049	MOB990182	421700	6935690	15	250	10.25	0.00	0.59	15.69	37.84	0.00	0.00	0.00	45.88	0.00	-
99MOB2050	MOB990182	421700	6935690	15	250	9.33	2.36	2.47	11.47	37.19	0.00	0.00	0.00	46.52	0.00	-
99MOB2051	MOB990182	421700	6935690	15	250	9.60	0.42	3.44	14.18	32.64	0.00	0.00	0.00	49.32	0.00	-
99MOB2052	MOB990182	421700	6935690	15	250	7.70	1.30	2.34	11.17	27.92	0.00	0.00	0.00	57.27	0.00	-
99MOB2053	MOB990182	421700	6935690	15	250	9.60	1.77	1.88	9.80	28.78	0.00	0.00	0.00	41.92	0.00	-
99MOB2054	MOB990182	421700	6935690	15	250	7.98	0.63	1.88	10.92	36.51	0.00	0.00	0.00	50.06	0.00	-
99MOB2073	MOB990197	387813	6902215	15	250	8.20	0.85	3.54	19.17	35.53	0.00	0.00	0.00	29.43	11.48	Other: clay balls or till or immature diamict?
99MOB2075	MOB990200	402332	6910418	15	250	6.60	1.98	7.31	16.13	39.27	0.00	0.00	0.00	35.31	0.00	-

Appendix V
Carbonate Content

Note:

Sample preparation
Dry sieve 230 mesh (<0.063 mm fraction)

Method
Chittick

Appendix V: Carbonate Content
(<0.063 mm fraction)

Sample	Station ID	Easting	Northing	UTM	% Calcite	% Dolomite	% Total Carbonate	Ratio Calcite/Dolomite
97MOB0001	97MITE-1	388149	6913294	15	0.93	0.22	1.15	4.13
97MOB0002	97MITE-1	388149	6913294	15	0.94	0.00	0.94	N/A
97MOB0005	97MITE-2	389326	6912075	15	0.69	0.22	0.92	3.09
97MOB0006	97MITE-2	389326	6912075	15	0.45	0.45	0.90	1.00
97MOB0007	97MITE-2	389326	6912075	15	0.46	0.22	0.68	2.05
97MOB0008	97MITE-2	389326	6912075	15	0.70	0.00	0.70	N/A
97MOB0009	97MITE-2	389326	6912075	15	0.69	0.22	0.92	3.09
97MOB0010	97MITE-2	389326	6912075	15	0.44	0.67	1.11	0.65
97MOB0011	97MITE-2	389326	6912075	15	0.69	0.22	0.92	3.09
97MOB0014	97MITE-A	389500	6911539	15	0.70	0.00	0.70	N/A
97MOB0015	97MITE-3	390102	6911081	15	0.68	0.45	1.13	1.52
97MOB0016	97MITE-3	390102	6911081	15	0.46	0.22	0.68	2.05
97MOB0017	97MITE-3	390102	6911081	15	0.70	0.00	0.70	N/A
97MOB0018	97MITE-3	390102	6911081	15	0.92	0.22	1.14	4.13
97MOB0019	97MITE-3	390102	6911081	15	0.69	0.22	0.92	3.09
97MOB0023	97MITE-B	390237	6910960	15	0.70	0.00	0.70	N/A
97MOB0024	97MITE-C	390567	6910751	15	-0.01	0.22	0.22	-0.04
97MOB0025	97MITE-4	390745	6910178	15	0.22	0.23	0.45	0.98
97MOB0026	97MITE-4	390745	6910178	15	0.45	0.23	0.68	1.99
97MOB0027	97MITE-4	390745	6910178	15	0.20	0.68	0.88	0.30
97MOB0028	97MITE-4	390745	6910178	15	0.45	0.23	0.68	1.99
97MOB0029	97MITE-4	390745	6910178	15	0.70	0.01	0.70	106.46
97MOB0033	97MITE-5	391464	6909375	15	0.68	0.46	1.13	1.49
97MOB0034	97MITE-5	391464	6909375	15	0.45	0.23	0.68	1.99
97MOB0035	97MITE-5	391464	6909375	15	0.69	0.23	0.92	2.97
97MOB0036	97MITE-5	391464	6909375	15	0.69	0.23	0.92	2.97
97MOB0037	97MITE-5	391464	6909375	15	0.92	0.23	1.15	3.94
97MOB0038	97MITE-5	391464	6909375	15	0.45	0.23	0.68	1.99
97MOB0042	97MITE-6	392286	6908555	15	0.69	0.23	0.92	2.97
97MOB0043	97MITE-6	392286	6908555	15	0.69	0.23	0.92	2.97
97MOB0044	97MITE-6	392286	6908555	15	0.89	0.91	1.80	0.98
97MOB0045	97MITE-6	392286	6908555	15	0.45	0.23	0.68	1.99
97MOB0046	97MITE-6	392286	6908555	15	0.69	0.23	0.92	2.97
97MOB0050	97MITE-7	392921	6907769	15	0.69	0.23	0.92	2.97
97MOB0051	97MITE-7	392921	6907769	15	1.27	2.93	4.20	0.43
97MOB0052	97MITE-7	392921	6907769	15	0.40	1.58	1.97	0.25
97MOB0053	97MITE-7	392921	6907769	15	0.70	0.01	0.70	106.46
97MOB0054	97MITE-7	392921	6907769	15	0.69	0.23	0.92	2.97
97MOB0058	97MITE-8	393721	6906996	15	0.64	1.35	1.99	0.47
97MOB0059	97MITE-8	393721	6906996	15	0.44	0.68	1.11	0.64
97MOB0060	97MITE-8	393721	6906996	15	0.45	0.23	0.68	1.99
97MOB0061	97MITE-8	393721	6906996	15	0.46	0.00	0.47	106.46
97MOB0062	97MITE-8	393721	6906996	15	0.45	0.45	0.90	0.98
97MOB0066	97MITE-9	394512	6906204	15	0.22	0.23	0.45	0.98
97MOB0067	97MITE-9	394512	6906204	15	0.70	0.01	0.70	106.46
97MOB0068	97MITE-9	394512	6906204	15	0.69	0.23	0.92	2.97
97MOB0069	97MITE-9	394512	6906204	15	0.70	0.01	0.70	106.46
97MOB0070	97MITE-9	394512	6906204	15	0.21	0.45	0.66	0.47
97MOB0074	97MITE-10	395217	6905369	15	0.93	0.01	0.94	106.46
97MOB0075	97MITE-10	395217	6905369	15	0.70	0.01	0.70	106.46
97MOB0076	97MITE-10	395217	6905369	15	0.69	0.23	0.92	2.97
97MOB0077	97MITE-10	395217	6905369	15	2.62	3.84	6.47	0.68
97MOB0078	97MITE-10	395217	6905369	15	0.23	0.00	0.23	N/A
97MOB0079	97MITE-10	395217	6905369	15	0.70	0.00	0.70	N/A
97MOB0080	97MITE-10	395217	6905369	15	0.22	0.22	0.45	1.00
97MOB0084	97MITE-E	379569	6909418	15	0.45	0.22	0.68	2.05
97MOB0085	97MITE-F	380429	6908638	15	0.69	0.22	0.91	3.09
97MOB0086	97MITE-G	380484	6908190	15	0.70	0.00	0.70	N/A
97MOB0087	97MITE-H	403250	6914400	15	0.70	0.00	0.70	N/A
97MOB0088	97MITE-I	374031	6900295	15	0.70	0.00	0.70	N/A
97MOB0089	97MITE-J	375392	6899236	15	0.70	0.00	0.70	N/A
97MOB0090	97MITE-K	376942	6897863	15	0.69	0.22	0.91	3.09

Appendix VI
Clay Mineralogy of Till by XRD

Note:
X-ray powder diffraction analysis at MRD's Mineralogical Laboratory (J. Percival); pattern interpretation determined with JADE software.

Appendix VI: Clay Mineralogy by XRD

Sample	Quartz (%)	Plagioclase (%)	K-feldspar (%)	Chlorite (%)	Illite** (%)	Hematite* (%)	Amphibole (%)	Comments
97MOB0005	49	19	15	4	tr	10	3	Trace amount of illite, amphibole and mixed layer clay.
97MOB0011	27	21	24	5	13	8	2	Minor-trace amount of amphibole.
97MOB0017	36	27	23	5	3	tr	5	
97MOB0068	45	17	17	4	tr	12	5	
97MOB0074	35	23	20	7	10	tr	5	Trace amount of mixed layer illite-chlorite.
97MOB0078	60	23	12	2	tr	tr	3	
tr = Trace amount								
*The estimate of the wt% of hematite maybe too high; X-ray peak slightly shifted to lower angle and may actually be a mixture of amphibole and hematite.								
**Illite is a mixture of muscovite and biotite, with dominant biotite unless otherwise noted.								

Appendix VII
Sand Fraction Mineralogy of Till
Part A: Light Minerals

Note:

Sample preparation
Wet sieve at 63-250 µm range; separation with methylene iodide (s.g. < 3.3)

Method
Counted under binocular microscope at Consorminex Inc. (maximum 150 grains)

Appendix VIIa: Light Mineral Fraction Mineralogy

Percent proportion light minerals, <3.3 s.g., 63-250μm, epoxy cement mount, 150 grains counted.

Sample	Station ID	Easting	Northing	UTM	QU (%)	Qw (%)	Qj (%)	*Qtot (%)*	Jn (%)	GO (%)	HB (%)	EP (%)	BI (%)	PX (%)	UK (%)
97MOB0002	97MITE-1	388149	6913294	15	76.7	16.7	3.3	*96.7*	1.3	0.7	0.7	0.0	0.7	0.0	0.0
97MOB0009	97MITE-2	389326	6912075	15	68.7	18.7	6.7	*94.1*	2.0	0.0	2.7	0.0	0.0	0.7	0.7
97MOB0017	97MITE-3	390102	6911081	15	66.6	24.0	1.3	*91.1*	1.3	0.7	3.3	0.0	0.7	1.3	0.7
97MOB0038	97MITE-5	391464	6909375	15	64.7	26.7	3.3	*94.7*	3.3	0.7	0.7	0.0	0.0	0.7	0.0
97MOB0068	97MITE-9	394512	6906204	15	75.4	16.0	4.0	*95.4*	1.3	0.7	2.0	0.0	0.0	0.7	0.0
97MOB0078	97MITE-10	395217	6905369	15	72.7	16.7	8.0	*97.4*	0.0	0.0	2.0	0.0	0.0	0.7	0.0
97MOB0089	97MITE-J	375392	6899236	15	67.4	14.0	7.3	*88.7*	1.3	1.3	4.7	0.0	1.3	2.7	0.0

Notes: QU=quartz, colourless, some with air bubbles; Qw=quartz, white; Qj=quartz with yellow tinge; Qtot=total quartz; Jn= yellow, unidentified mineral; GO=goethite; HB=hormblende; EP=epidote; BI=biotite; PX=pyroxene; UK=unknown.

Appendix VII
Sand Fraction Mineralogy of Till
Part B: Heavy Minerals

Note:
Sample preparation
Wet sieve at 63-250 µm range; separation with methylene iodide (s.g. > 3.3)

Method
Counted under binocular microscope at Consorminex Inc. (maximum 200 grains)

Appendix VIIb: Heavy Metal Mineral Fraction Mineralogy

Percent proportion heavy minerals, >3.3 s.g., 63-250µm, epoxy cement mount, 200 grains counted.

Sample	Station ID	Easting	Northing	UTM	PY (%)	Pg (%)	HM (%)	Hr (%)	IL (%)	It (%)	RU (%)	Ro (%)	LX (%)	GO (%)	SD (%)	MZ (%)	HB (%)	Hc (%)	CP (%)
97MOB0002	97MITE-1	388149	6913294	15	0.5	0.0	47.0	7.0	6.0	0.0	0.0	0.5	0.0	0.5	0.0	0.0	12.0	0.0	0.0
97MOB0009	97MITE-2	389326	6912075	15	0.0	0.0	40.0	7.0	3.5	0.0	0.0	0.0	0.5	1.0	0.0	0.0	14.5	0.0	0.5
97MOB0017	97MITE-3	390102	6911081	15	0.0	0.0	50.5	7.5	5.0	1.5	0.0	0.5	0.0	0.0	0.0	0.0	11.0	0.0	0.0
97MOB0038	97MITE-5	391464	6909375	15	0.0	0.0	42.0	1.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
97MOB0068	97MITE-9	394512	6906204	15	0.0	0.0	19.5	3.5	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.5	0.0	0.0
97MOB0078	97MITE-10	395217	6905369	15	0.0	0.0	22.5	5.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.5	0.0	0.0
97MOB0089	97MITE-J	375392	6899236	15	0.0	0.5	30.0	12.5	4.0	0.5	0.5	0.5	0.0	0.0	0.0	0.0	21.0	0.0	0.0

Notes: PY=pyrite; Pg=pyrite, goethite covered; HM=hematite; Hr=hematite, round; IL=ilmenite; It=ilmenite, multi-xtalline; RU=rutile; Ro=rutile, orange; LX=leucoxene; GO=goethite;
SD=siderite; MZ=monazite; HB=hornblende; Hc=hornblende, brown; CP=clinopyroxene;

Sample	**Station ID**	**Easting**	**Northing**	**UTM**	**DP (%)**	**OP (%)**	**EP (%)**	**CL (%)**	**Ek (%)**	**GA (%)**	**Gi (%)**	**Gj (%)**	**SP (%)**	**ST (%)**	**ZR (%)**	**KY (%)**	**OV (%)**	**Ia (%)**	**UK (%)**
97MOB0002	97MITE-1	388149	6913294	15	0.0	7.0	9.5	1.5	0.0	0.5	3.5	0.5	2.0	0.0	0.5	0.0	0.0	0.0	1.5
97MOB0009	97MITE-2	389326	6912075	15	5.0	6.5	10.0	0.5	0.0	4.0	2.0	1.5	1.5	0.0	0.5	0.0	0.0	0.0	1.5
97MOB0017	97MITE-3	390102	6911081	15	1.0	3.5	13.0	1.0	0.0	1.0	3.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
97MOB0038	97MITE-5	391464	6909375	15	8.0	5.0	13.0	0.0	0.0	0.0	0.5	1.5	0.5	0.0	0.0	0.0	0.0	0.0	2.5
97MOB0068	97MITE-9	394512	6906204	15	7.5	4.5	8.0	0.5	0.0	0.5	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
97MOB0078	97MITE-10	395217	6905369	15	10.5	4.0	17.0	0.0	0.0	0.0	1.0	1.0	3.0	0.0	0.0	0.0	0.0	0.0	1.5
97MOB0089	97MITE-J	375392	6899236	15	4.0	1.5	17.0	0.5	0.0	0.0	4.0	1.5	1.0	0.0	1.0	0.0	0.0	0.0	0.0

Notes: DP=diopside; OP=orthopyroxene; EP=epidote; Cl=clinozoisite; Ek=epidote, kaki;
GA=garnet, pink; Gi=garnet, colourless; Gj=garnet, orange; SP=titanite; ST=staurolite; ZR=zircon; KY=kyanite; OV=olivine; Ia=colourless, anisotropic; UK=unknown and unidentifiables.

97MOB0038	Several metal shavings, probably aluminium contamination from tools.
97MOB0089	Several distinct, acicular hornblende grains. Also, note sulphide grain.

Appendix VIII
Till Geochemistry, <2 mm fraction, ICP-AES, aqua regia leach

Note:

Sample preparation:	dry sieve (10 mesh)
Analytical digestion:	Aqua Regia (HCL-HNO_3, 3:1)
Analytical method:	Inductively Coupled Plasma - Atomic Emission Spectrometry, Hg by Cold Vapor - Atomic Absorption Spectrometry
Laboratory:	Chemex Ltd.

Detection Limits:

Element	Detection limit	Element	Detection limit
Ag (ppm)	0.2	Mg (%)	0.01
Al (%)	0.01	Mn (ppm)	5
As (ppm)	2	Mo (ppm)	1
B (ppm)	10	Na (%)	0.01
Ba (ppm)	10	Ni (ppm)	1
Be (ppm)	0.5	P (ppm)	10
Bi (ppm)	2	Pb (ppm)	2
Ca (%)	0.01	S (%)	0.01
Cd (ppm)	0.5	Sb (ppm)	2
Co (ppm)	1	Sc (ppm)	1
Cr (ppm)	1	Sr (ppm)	1
Cu (ppm)	1	Ti (%)	0.01
Fe (%)	0.01	Tl (ppm)	10
Ga (ppm)	10	U (ppm)	10
Hg (ppb)	10	V (ppm)	1
K (%)	0.01	W (ppm)	10
La (ppm)	10	Zn (ppm)	2

Appendix VIII: Geochemistry of Till (<2mm fraction)
by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb*
97MOB0001	97MITE-1	388149	6913294	15	<0.2	0.26	<2	-	30	<0.5	<2	0.26	<0.5	1	9	4	0.81	<10	<10
97MOB0002	97MITE-1	388149	6913294	15	<0.2	0.27	2	-	40	<0.5	<2	0.25	<0.5	1	61	5	0.84	<10	30
97MOB0005	97MITE-2	389326	6912075	15	<0.2	1.01	<2	-	100	0.5	<2	0.36	<0.5	5	81	18	1.43	<10	<10
97MOB0006	97MITE-2	389326	6912075	15	<0.2	1.18	<2	-	110	0.5	<2	0.38	<0.5	6	58	20	1.51	<10	<10
97MOB0007	97MITE-2	389326	6912075	15	<0.2	1.22	2	-	120	0.5	<2	0.39	<0.5	6	84	20	1.57	<10	<10
97MOB0008	97MITE-2	389326	6912075	15	<0.2	1.09	<2	-	110	0.5	<2	0.37	<0.5	4	67	19	1.49	<10	<10
97MOB0009	97MITE-2	389326	6912075	15	<0.2	1.19	<2	-	120	0.5	<2	0.43	<0.5	4	79	20	1.57	<10	<10
97MOB0010	97MITE-2	389326	6912075	15	<0.2	0.79	<2	-	80	<0.5	<2	0.37	<0.5	4	62	12	1.29	<10	<10
97MOB0011	97MITE-2	389326	6912075	15	<0.2	0.45	<2	-	50	<0.5	<2	0.36	<0.5	3	82	6	1.10	<10	30
97MOB0014	97MITE-A	389500	6911539	15	<0.2	0.55	<2	-	30	<0.5	<2	0.10	<0.5	1	56	3	0.77	<10	<10
97MOB0015	97MITE-3	390102	6911081	15	<0.2	0.40	<2	-	40	<0.5	<2	0.27	<0.5	3	85	3	1.10	<10	<10
97MOB0016	97MITE-3	390102	6911081	15	<0.2	0.41	<2	-	40	<0.5	<2	0.28	<0.5	4	90	3	1.02	<10	<10
97MOB0017	97MITE-3	390102	6911081	15	<0.2	0.42	2	-	40	<0.5	<2	0.29	<0.5	3	104	3	1.10	<10	<10
97MOB0018	97MITE-3	390102	6911081	15	<0.2	0.39	<2	-	40	<0.5	<2	0.30	<0.5	3	100	4	1.07	<10	<10
97MOB0019	97MITE-3	390102	6911081	15	<0.2	0.38	2	-	40	<0.5	<2	0.33	<0.5	3	165	4	1.14	<10	<10
97MOB0023	97MITE-B	390237	6910960	15	<0.2	0.42	<2	-	50	<0.5	<2	0.31	<0.5	3	111	5	1.13	<10	<10
97MOB0024	97MITE-C	390567	6910751	15	<0.2	0.40	<2	-	40	<0.5	<2	0.32	<0.5	3	101	8	1.09	<10	<10
97MOB0025	97MITE-4	390745	6910178	15	<0.2	0.61	<2	-	70	<0.5	<2	0.37	<0.5	4	95	6	1.21	<10	<10
97MOB0026	97MITE-4	390745	6910178	15	<0.2	0.76	<2	-	80	<0.5	<2	0.38	<0.5	4	112	9	1.31	<10	<10
97MOB0027	97MITE-4	390745	6910178	15	<0.2	0.53	<2	-	60	<0.5	<2	0.35	<0.5	4	83	5	1.15	<10	<10
97MOB0028	97MITE-4	390745	6910178	15	<0.2	0.40	<2	-	50	<0.5	<2	0.31	<0.5	2	100	4	1.06	<10	<10
97MOB0029	97MITE-4	390745	6910178	15	<0.2	0.40	2	-	50	<0.5	<2	0.31	<0.5	3	92	4	1.05	<10	<10
97MOB0033	97MITE-5	391464	6909375	15	<0.2	0.52	<2	-	70	<0.5	<2	0.32	<0.5	4	102	6	1.16	<10	<10
97MOB0034	97MITE-5	391464	6909375	15	<0.2	0.52	<2	-	70	<0.5	<2	0.31	<0.5	4	87	6	1.11	<10	<10
97MOB0035	97MITE-5	391464	6909375	15	<0.2	0.54	<2	-	70	<0.5	<2	0.33	<0.5	3	99	7	1.13	<10	<10
97MOB0036	97MITE-5	391464	6909375	15	<0.2	1.17	<2	-	120	0.5	<2	0.38	<0.5	5	87	13	1.57	<10	<10
97MOB0037	97MITE-5	391464	6909375	15	<0.2	1.03	<2	-	100	0.5	<2	0.41	<0.5	5	113	11	1.55	<10	<10
97MOB0038	97MITE-5	391464	6909375	15	<0.2	0.70	<2	-	70	<0.5	<2	0.35	<0.5	4	114	7	1.28	<10	<10
97MOB0042	97MITE-6	392286	6908555	15	<0.2	0.77	<2	-	80	<0.5	<2	0.37	<0.5	3	105	11	1.33	<10	<10
97MOB0043	97MITE-6	392286	6908555	15	<0.2	0.98	<2	-	100	0.5	<2	0.37	<0.5	5	90	15	1.43	<10	<10
97MOB0044	97MITE-6	392286	6908555	15	<0.2	1.03	2	-	110	0.5	<2	0.39	<0.5	4	95	15	1.48	<10	<10
97MOB0045	97MITE-6	392286	6908555	15	<0.2	0.66	<2	-	70	<0.5	<2	0.37	<0.5	4	96	8	1.24	<10	<10
97MOB0046	97MITE-6	392286	6908555	15	<0.2	0.40	<2	-	50	<0.5	<2	0.33	<0.5	2	102	4	1.06	<10	<10
97MOB0050	97MITE-7	392921	6907769	15	<0.2	0.78	<2	-	80	<0.5	<2	0.38	<0.5	4	160	10	1.39	<10	<10
97MOB0051	97MITE-7	392921	6907769	15	<0.2	0.93	<2	-	100	<0.5	<2	0.43	<0.5	4	164	13	1.55	<10	<10
97MOB0052	97MITE-7	392921	6907769	15	<0.2	0.69	<2	-	70	<0.5	<2	0.38	<0.5	3	103	10	1.31	<10	<10
97MOB0053	97MITE-7	392921	6907769	15	<0.2	0.49	<2	-	60	<0.5	<2	0.36	<0.5	3	161	5	1.19	<10	<10
97MOB0054	97MITE-7	392921	6907769	15	<0.2	0.40	<2	-	50	<0.5	<2	0.33	<0.5	1	142	5	1.09	<10	<10
97MOB0058	97MITE-8	393721	6906996	15	<0.2	0.39	<2	-	50	<0.5	<2	0.30	<0.5	3	145	5	1.07	<10	<10
97MOB0059	97MITE-8	393721	6906996	15	<0.2	0.33	2	-	50	<0.5	<2	0.29	<0.5	1	143	4	1.04	<10	<10
97MOB0060	97MITE-8	393721	6906996	15	<0.2	0.33	<2	-	50	<0.5	<2	0.28	<0.5	3	165	4	0.98	<10	<10
97MOB0061	97MITE-8	393721	6906996	15	<0.2	0.39	<2	-	60	<0.5	<2	0.32	<0.5	3	202	4	1.14	<10	<10
97MOB0062	97MITE-8	393721	6906996	15	<0.2	0.41	<2	-	50	<0.5	<2	0.35	<0.5	4	191	4	1.19	<10	<10
97MOB0066	97MITE-9	394512	6906204	15	<0.2	0.47	<2	-	50	<0.5	<2	0.29	<0.5	3	310	3	1.26	<10	<10
97MOB0067	97MITE-9	394512	6906204	15	<0.2	0.41	2	-	40	<0.5	<2	0.32	<0.5	3	234	3	1.19	<10	<10
97MOB0068	97MITE-9	394512	6906204	15	<0.2	0.38	<2	-	40	<0.5	<2	0.32	<0.5	3	200	3	1.15	<10	<10
97MOB0069	97MITE-9	394512	6906204	15	<0.2	0.43	<2	-	50	<0.5	<2	0.35	<0.5	3	242	2	1.26	<10	<10
97MOB0070	97MITE-9	394512	6906204	15	<0.2	0.40	<2	-	40	<0.5	<2	0.30	<0.5	3	193	3	1.11	<10	<10
97MOB0074	97MITE-10	395217	6905369	15	<0.2	0.62	<2	-	70	<0.5	<2	0.35	<0.5	3	154	11	1.25	<10	<10
97MOB0075	97MITE-10	395217	6905369	15	<0.2	0.54	<2	-	60	<0.5	<2	0.32	<0.5	4	151	9	1.23	<10	<10
97MOB0076	97MITE-10	395217	6905369	15	<0.2	0.45	<2	-	60	<0.5	<2	0.32	<0.5	3	153	6	1.14	<10	<10
97MOB0077	97MITE-10	395217	6905369	15	<0.2	0.47	<2	-	60	<0.5	<2	0.33	<0.5	4	179	7	1.15	<10	10

*Hg analysed by CV-AAS, aqua regia digestion

Appendix VIII: Geochemistry of Till (<2mm fraction)
by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0001	97MITE-1	388149	6913294	15	0.06	10	0.12	70	<1	0.01	4	550	8	-	<2	1	30	0.04	<10	<10	13	<10	8
97MOB0002	97MITE-1	388149	6913294	15	0.07	10	0.13	70	<1	0.01	5	500	14	-	<2	1	30	0.04	<10	<10	12	<10	8
97MOB0005	97MITE-2	389326	6912075	15	0.30	30	0.40	150	<1	0.03	14	570	10	-	<2	2	48	0.06	<10	<10	20	<10	28
97MOB0006	97MITE-2	389326	6912075	15	0.35	30	0.46	160	<1	0.03	14	580	10	-	<2	3	52	0.07	<10	<10	21	<10	32
97MOB0007	97MITE-2	389326	6912075	15	0.36	30	0.46	170	<1	0.03	15	610	14	-	<2	3	54	0.07	<10	<10	22	<10	34
97MOB0008	97MITE-2	389326	6912075	15	0.32	30	0.43	155	1	0.03	14	580	14	-	<2	3	52	0.07	<10	<10	21	<10	30
97MOB0009	97MITE-2	389326	6912075	15	0.34	30	0.45	165	<1	0.03	14	630	12	-	<2	3	59	0.08	<10	<10	23	<10	32
97MOB0010	97MITE-2	389326	6912075	15	0.22	30	0.32	140	<1	0.03	11	570	8	-	<2	2	49	0.07	<10	<10	19	<10	22
97MOB0011	97MITE-2	389326	6912075	15	0.12	20	0.19	105	<1	0.03	7	570	4	-	<2	1	46	0.06	<10	<10	16	<10	12
97MOB0014	97MITE-A	389500	6911539	15	0.27	10	0.13	55	<1	0.01	5	180	4	-	<2	1	14	0.03	<10	<10	10	<10	6
97MOB0015	97MITE-3	390102	6911081	15	0.09	10	0.20	100	<1	0.02	6	440	6	-	<2	1	35	0.05	<10	<10	16	<10	14
97MOB0016	97MITE-3	390102	6911081	15	0.10	10	0.18	95	<1	0.02	6	470	6	-	<2	1	37	0.05	<10	<10	16	<10	12
97MOB0017	97MITE-3	390102	6911081	15	0.10	10	0.20	95	<1	0.03	6	470	8	-	<2	1	39	0.06	<10	<10	16	<10	12
97MOB0018	97MITE-3	390102	6911081	15	0.10	10	0.19	95	<1	0.03	7	500	4	-	<2	1	38	0.05	<10	<10	16	<10	12
97MOB0019	97MITE-3	390102	6911081	15	0.09	20	0.16	95	<1	0.03	6	550	6	-	<2	1	39	0.06	<10	<10	17	<10	12
97MOB0023	97MITE-B	390237	6910960	15	0.11	20	0.20	100	1	0.03	7	500	2	-	<2	1	37	0.06	<10	<10	17	<10	14
97MOB0024	97MITE-C	390567	6910751	15	0.09	10	0.19	100	<1	0.03	7	520	2	-	<2	1	40	0.06	<10	<10	17	<10	12
97MOB0025	97MITE-4	390745	6910176	15	0.16	20	0.23	125	<1	0.03	8	610	8	-	<2	1	47	0.07	<10	<10	18	<10	16
97MOB0026	97MITE-4	390745	6910178	15	0.20	30	0.27	130	<1	0.03	10	620	8	-	<2	2	50	0.07	<10	<10	19	<10	18
97MOB0027	97MITE-4	390745	6910178	15	0.13	20	0.21	115	<1	0.02	7	610	8	-	<2	1	44	0.06	<10	<10	17	<10	14
97MOB0028	97MITE-4	390745	6910178	15	0.10	10	0.17	100	<1	0.02	6	550	6	-	<2	1	38	0.06	<10	<10	15	<10	12
97MOB0029	97MITE-4	390745	6910178	15	0.10	20	0.17	100	<1	0.03	7	570	6	-	<2	1	36	0.06	<10	<10	16	<10	12
97MOB0033	97MITE-5	391464	6909375	15	0.14	20	0.23	115	<1	0.02	9	560	6	-	<2	1	38	0.06	<10	<10	17	<10	16
97MOB0034	97MITE-5	391464	6909375	15	0.14	20	0.23	120	<1	0.02	7	520	8	-	<2	1	39	0.06	<10	<10	16	<10	16
97MOB0035	97MITE-5	391464	6909375	15	0.15	20	0.23	125	<1	0.03	8	550	8	-	<2	1	44	0.06	<10	<10	17	<10	14
97MOB0036	97MITE-5	391464	6909375	15	0.33	30	0.45	175	<1	0.03	13	590	12	-	<2	3	55	0.08	<10	<10	23	<10	30
97MOB0037	97MITE-5	391464	6909375	15	0.28	30	0.40	175	<1	0.03	12	640	8	-	<2	3	57	0.08	<10	<10	23	<10	26
97MOB0038	97MITE-5	391464	6909375	15	0.17	20	0.29	145	<1	0.02	9	540	6	-	<2	2	47	0.07	<10	<10	19	<10	20
97MOB0042	97MITE-6	392286	6908555	15	0.22	30	0.31	145	<1	0.03	10	580	10	-	<2	2	50	0.07	<10	<10	20	<10	22
97MOB0043	97MITE-6	392286	6908555	15	0.29	30	0.39	155	<1	0.03	13	580	12	-	<2	2	49	0.07	<10	<10	21	<10	26
97MOB0044	97MITE-6	392286	6908555	15	0.30	30	0.40	165	<1	0.03	13	580	8	-	<2	3	52	0.07	<10	<10	21	<10	28
97MOB0045	97MITE-6	392286	6908555	15	0.18	20	0.27	130	<1	0.03	10	580	8	-	<2	1	47	0.07	<10	<10	19	<10	18
97MOB0046	97MITE-6	392286	6908555	15	0.10	20	0.18	95	<1	0.03	6	550	8	-	<2	1	40	0.06	<10	<10	15	<10	12
97MOB0050	97MITE-7	392921	6907769	15	0.23	30	0.30	135	<1	0.04	11	580	8	-	<2	2	51	0.07	<10	<10	21	<10	20
97MOB0051	97MITE-7	392921	6907769	15	0.27	30	0.35	155	<1	0.05	12	630	12	-	<2	3	57	0.08	<10	<10	23	<10	24
97MOB0052	97MITE-7	392921	6907769	15	0.18	30	0.27	130	<1	0.03	9	610	10	-	<2	2	50	0.07	<10	<10	20	<10	20
97MOB0053	97MITE-7	392921	6907769	15	0.14	20	0.20	115	<1	0.04	8	560	6	-	<2	1	45	0.07	<10	<10	17	<10	14
97MOB0054	97MITE-7	392921	6907769	15	0.12	20	0.17	95	<1	0.04	7	530	4	-	<2	1	39	0.06	<10	<10	15	<10	12
97MOB0058	97MITE-8	393721	6906996	15	0.12	10	0.17	100	<1	0.04	7	490	6	-	<2	1	39	0.05	<10	<10	15	<10	12
97MOB0059	97MITE-8	393721	6906996	15	0.10	10	0.15	90	<1	0.03	6	510	6	-	<2	1	36	0.05	<10	<10	14	<10	10
97MOB0060	97MITE-8	393721	6906996	15	0.11	10	0.14	85	<1	0.04	6	470	8	-	<2	1	37	0.05	<10	<10	13	<10	10
97MOB0061	97MITE-8	393721	6906996	15	0.12	20	0.16	100	<1	0.04	6	510	10	-	<2	1	45	0.06	<10	<10	16	<10	12
97MOB0062	97MITE-8	393721	6906996	15	0.12	20	0.17	100	<1	0.04	7	540	6	-	<2	1	48	0.06	<10	<10	17	<10	12
97MOB0066	97MITE-9	394512	6906204	15	0.12	10	0.20	100	<1	0.04	8	470	8	-	<2	1	44	0.06	<10	<10	16	<10	12
97MOB0067	97MITE-9	394512	6906204	15	0.10	10	0.16	95	<1	0.04	7	560	4	-	<2	1	43	0.06	<10	<10	17	<10	10
97MOB0068	97MITE-9	394512	6906204	15	0.09	20	0.16	90	<1	0.03	7	580	8	-	<2	1	42	0.06	<10	<10	16	<10	10
97MOB0069	97MITE-9	394512	6906204	15	0.11	20	0.17	95	<1	0.05	7	580	4	-	<2	1	48	0.07	<10	<10	17	<10	10
97MOB0070	97MITE-9	394512	6906204	15	0.10	10	0.16	85	<1	0.04	6	500	8	-	<2	1	40	0.06	<10	<10	15	<10	10
97MOB0074	97MITE-10	395217	6905369	15	0.17	20	0.25	120	<1	0.04	10	520	6	-	<2	1	44	0.07	<10	<10	17	<10	16
97MOB0075	97MITE-10	395217	6905369	15	0.15	20	0.24	115	<1	0.04	10	510	6	-	<2	1	40	0.06	<10	<10	17	<10	16
97MOB0076	97MITE-10	395217	6905369	15	0.13	20	0.20	100	<1	0.04	8	510	4	-	<2	1	39	0.06	<10	<10	16	<10	12
97MOB0077	97MITE-10	395217	6905369	15	0.13	20	0.20	105	1	0.04	8	510	4	-	<2	1	41	0.06	<10	<10	16	<10	14

*Hg analysed by CV-AAS, aqua regia digestion

Appendix VIII: Geochemistry of Till (<2mm fraction) by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb*
97MOB0078	97MITE-10	395217	6905369	15	<0.2	0.43	<2	-	60	<0.5	<2	0.36	<0.5	3	212	5	1.19	<10	<10
97MOB0079	97MITE-10	395217	6905369	15	<0.2	0.46	<2	-	50	0.5	<2	0.38	<0.5	3	216	5	1.19	<10	<10
97MOB0080	97MITE-10	395217	6905369	15	<0.2	0.46	<2	-	50	<0.5	<2	0.36	<0.5	3	201	5	1.18	<10	<10
97MOB0084	97MITE-E	379569	6909418	15	<0.2	1.31	<2	-	140	0.5	<2	0.42	<0.5	6	155	16	1.77	<10	<10
97MOB0085	97MITE-F	380429	6908638	15	<0.2	0.60	<2	-	60	<0.5	<2	0.34	<0.5	4	208	5	1.27	<10	<10
97MOB0086	97MITE-G	380484	6908190	15	<0.2	0.64	2	-	70	<0.5	<2	0.36	<0.5	2	162	10	1.24	<10	<10
97MOB0087	97MITE-H	403250	6914400	15	<0.2	0.47	<2	-	60	<0.5	<2	0.34	<0.5	3	238	3	1.22	<10	<10
97MOB0088	97MITE-I	374031	6900295	15	<0.2	0.56	<2	-	50	<0.5	<2	0.29	<0.5	5	220	10	1.31	<10	<10
97MOB0089	97MITE-J	375392	6899236	15	<0.2	0.55	<2	-	50	<0.5	<2	0.35	<0.5	4	156	10	1.31	<10	<10
97MOB0090	97MITE-K	376942	6897863	15	<0.2	1.16	<2	-	110	0.5	<2	0.38	<0.5	6	133	18	1.62	<10	<10
99MOB2001	MOB990164	404026	6916661	15	<0.2	0.42	<2	10	40	<0.5	<2	0.30	<0.5	4	14	8	1.04	<10	<10
99MOB2003	MOB990165	404454	6915898	15	<0.2	0.39	<2	10	40	<0.5	<2	0.29	<0.5	3	12	6	1.05	<10	<10
99MOB2005	MOB990166	405045	6914929	15	<0.2	0.63	2	<10	70	<0.5	<2	0.31	<0.5	5	18	20	1.26	<10	<10
99MOB2007	MOB990167	402005	6914817	15	<0.2	0.43	<2	10	50	<0.5	<2	0.24	<0.5	3	13	8	0.91	<10	<10
99MOB2008	MOB990167	402005	6914817	15	<0.2	0.49	<2	10	50	<0.5	<2	0.25	<0.5	3	18	5	1.21	<10	<10
99MOB2009	MOB990167	402005	6914817	15	<0.2	0.51	<2	10	50	<0.5	<2	0.27	<0.5	3	16	6	0.98	<10	<10
99MOB2010	MOB990167	402005	6914817	15	<0.2	0.49	<2	10	50	<0.5	<2	0.28	<0.5	3	14	5	1.01	<10	<10
99MOB2011	MOB990167	402005	6914817	15	<0.2	0.55	<2	10	50	<0.5	<2	0.29	<0.5	3	17	6	1.10	<10	<10
99MOB2012	MOB990167	402005	6914817	15	<0.2	0.54	<2	10	50	<0.5	<2	0.32	<0.5	3	17	5	1.15	<10	<10
99MOB2014	MOB990167	402005	6914817	15	<0.2	0.45	<2	10	50	<0.5	<2	0.31	<0.5	3	14	8	1.07	<10	<10
99MOB2015	MOB990168	405610	6914374	15	<0.2	0.56	4	10	70	<0.5	<2	0.30	<0.5	4	15	10	1.07	<10	<10
99MOB2017	MOB990169	407108	6913055	15	0.4	0.38	44	<10	70	<0.5	<2	0.12	<0.5	3	13	14	4.38	<10	10
99MOB2019	MOB990170	408214	6911942	15	<0.2	0.47	2	10	50	<0.5	<2	0.35	<0.5	3	14	9	1.13	<10	<10
99MOB2021	MOB990171	408931	6911230	15	<0.2	0.52	<2	10	60	<0.5	<2	0.33	<0.5	4	14	11	1.10	<10	<10
99MOB2023	MOB990172	409839	6910689	15	<0.2	1.04	<2	10	90	<0.5	<2	0.48	<0.5	8	22	31	1.95	<10	<10
99MOB2025	MOB990173	410937	6909473	15	<0.2	0.70	<2	10	70	<0.5	<2	0.36	<0.5	5	17	13	1.33	<10	<10
99MOB2027	MOB990174	350895	6883517	15	1.6	0.49	<2	10	50	<0.5	<2	0.32	<0.5	3	17	60	1.54	<10	<10
99MOB2029	MOB990175	349732	6884943	15	<0.2	0.64	2	20	40	<0.5	<2	0.37	<0.5	6	19	12	1.45	<10	<10
99MOB2030	MOB990175	349732	6884943	15	<0.2	0.58	<2	10	40	<0.5	<2	0.35	<0.5	6	19	11	1.36	<10	<10
99MOB2031	MOB990175	349732	6884943	15	<0.2	0.60	<2	10	50	<0.5	<2	0.40	<0.5	5	20	11	1.39	<10	<10
99MOB2032	MOB990175	349732	6884943	15	<0.2	0.59	<2	10	40	<0.5	<2	0.40	<0.5	5	20	9	1.38	<10	<10
99MOB2033	MOB990175	349732	6884943	15	<0.2	0.48	<2	10	40	<0.5	<2	0.36	<0.5	4	18	7	1.28	<10	<10
99MOB2034	MOB990175	349732	6884943	15	<0.2	0.45	<2	10	30	<0.5	<2	0.31	<0.5	4	16	7	1.13	<10	<10
99MOB2036	MOB990176	350750	6884039	15	<0.2	0.54	<2	10	50	<0.5	<2	0.31	<0.5	5	18	8	1.24	<10	<10
99MOB2038	MOB990177	351670	6882871	15	<0.2	0.85	<2	10	80	<0.5	<2	0.37	<0.5	5	24	17	1.51	<10	<10
99MOB2040	MOB990178	349262	6885450	15	<0.2	0.63	6	10	60	<0.5	<2	0.38	<0.5	5	20	12	1.30	<10	<10
99MOB2042	MOB990179	421097	6936957	15	<0.2	0.39	2	<10	30	<0.5	<2	0.26	<0.5	3	16	6	0.99	<10	<10
99MOB2044	MOB990180	421422	6937243	15	<0.2	2.54	12	<10	190	<0.5	2	0.10	0.5	6	119	167	7.30	10	<10
99MOB2046	MOB990181	422725	6935968	15	<0.2	0.59	<2	<10	40	<0.5	<2	0.31	<0.5	5	21	32	1.26	<10	<10
99MOB2048	MOB990182	421700	6935690	15	<0.2	0.39	<2	<10	50	<0.5	<2	0.27	<0.5	3	13	5	1.00	<10	<10
99MOB2049	MOB990182	421700	6935690	15	<0.2	0.37	<2	<10	40	<0.5	<2	0.24	<0.5	3	14	5	0.96	<10	<10
99MOB2050	MOB990182	421700	6935690	15	<0.2	0.40	<2	<10	40	<0.5	<2	0.28	<0.5	3	15	5	1.06	<10	<10
99MOB2051	MOB990182	421700	6935690	15	<0.2	0.38	<2	<10	40	<0.5	<2	0.26	<0.5	3	14	5	1.00	<10	<10
99MOB2052	MOB990182	421700	6935690	15	<0.2	0.42	<2	<10	40	<0.5	<2	0.26	<0.5	4	15	5	1.03	<10	<10
99MOB2053	MOB990182	421700	6935690	15	<0.2	0.46	<2	<10	50	<0.5	<2	0.27	<0.5	3	15	5	1.03	<10	<10
99MOB2054	MOB990182	421700	6935690	15	<0.2	0.50	<2	<10	50	<0.5	<2	0.31	<0.5	4	16	6	1.15	<10	<10
99MOB2073	MOB990197	387813	6902215	15	<0.2	0.59	2	<10	60	<0.5	<2	0.16	<0.5	3	17	11	2.85	<10	<10
99MOB2075	MOB990200	402332	6910418	15	<0.2	0.49	<2	<10	50	<0.5	<2	0.30	<0.5	4	14	12	1.06	<10	<10

*Hg analysed by CV-AAS, aqua regia digestion

Appendix VIII: Geochemistry of Till (<2mm fraction)
by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0078	97MITE-10	395217	6905369	15	0.13	20	0.18	110	<1	0.04	8	550	2	-	<2	1	46	0.06	<10	<10	16	<10	12
97MOB0079	97MITE-10	395217	6905369	15	0.13	20	0.18	115	<1	0.05	8	570	6	-	<2	1	49	0.07	<10	<10	17	<10	16
97MOB0080	97MITE-10	395217	6905369	15	0.13	20	0.19	100	<1	0.04	8	530	6	-	<2	1	46	0.06	<10	<10	16	<10	14
97MOB0084	97MITE-E	379569	6909418	15	0.37	30	0.52	205	<1	0.04	17	580	10	-	<2	3	63	0.08	<10	<10	25	<10	32
97MOB0085	97MITE-F	380429	6908638	15	0.17	20	0.24	120	<1	0.05	9	550	8	-	<2	1	48	0.06	<10	<10	17	<10	14
97MOB0086	97MITE-G	380484	6908190	15	0.18	20	0.25	120	<1	0.04	10	540	4	-	<2	1	48	0.06	<10	<10	17	<10	16
97MOB0087	97MITE-H	403250	6914400	15	0.13	10	0.20	100	1	0.04	7	530	6	-	<2	1	47	0.06	<10	<10	16	<10	12
97MOB0088	97MITE-I	374031	6900295	15	0.13	20	0.25	155	<1	0.04	9	370	4	-	<2	1	39	0.06	<10	<10	17	<10	14
97MOB0089	97MITE-J	375392	6899236	15	0.13	20	0.27	130	<1	0.04	10	500	10	-	<2	1	47	0.07	<10	<10	19	<10	16
97MOB0090	97MITE-K	376942	6897863	15	0.32	30	0.48	185	<1	0.05	16	490	10	-	<2	3	53	0.08	<10	<10	23	<10	30
99MOB2001	MOB990164	404026	6916661	15	0.08	20	0.24	110	<1	0.02	7	520	6	<0.01	<2	1	36	0.06	<10	<10	17	<10	14
99MOB2003	MOB990165	404454	6915898	15	0.08	20	0.21	95	<1	0.02	6	560	4	<0.01	<2	1	38	0.06	<10	<10	17	<10	14
99MOB2005	MOB990166	405045	6914929	15	0.15	20	0.36	135	<1	0.02	10	600	4	<0.01	<2	1	35	0.06	<10	<10	20	<10	22
99MOB2007	MOB990167	402005	6914817	15	0.10	30	0.25	85	<1	0.01	8	370	2	0.01	<2	1	27	0.03	<10	<10	15	<10	16
99MOB2008	MOB990167	402005	6914817	15	0.11	20	0.28	85	<1	0.02	8	510	4	<0.01	<2	1	29	0.05	<10	<10	20	<10	16
99MOB2009	MOB990167	402005	6914817	15	0.11	20	0.26	80	<1	0.02	7	510	4	0.01	<2	1	34	0.05	<10	<10	18	<10	16
99MOB2010	MOB990167	402005	6914817	15	0.11	20	0.26	85	<1	0.03	7	520	4	<0.01	<2	1	35	0.06	<10	<10	19	<10	16
99MOB2011	MOB990167	402005	6914817	15	0.13	20	0.29	95	<1	0.03	8	540	4	<0.01	<2	1	38	0.06	<10	<10	21	<10	16
99MOB2012	MOB990167	402005	6914817	15	0.12	20	0.29	100	<1	0.03	8	550	4	<0.01	2	1	39	0.06	<10	<10	20	<10	16
99MOB2014	MOB990167	402005	6914817	15	0.12	20	0.23	105	<1	0.03	7	530	8	<0.01	<2	1	39	0.05	<10	<10	18	<10	18
99MOB2015	MOB990168	405610	6914374	15	0.15	20	0.27	120	<1	0.03	8	500	6	<0.01	<2	1	36	0.05	<10	<10	16	<10	18
99MOB2017	MOB990169	407108	6913055	15	0.13	<10	0.19	70	6	0.03	7	460	18	0.30	<2	1	22	0.06	<10	<10	17	<10	40
99MOB2019	MOB990170	408214	6911942	15	0.12	20	0.24	115	<1	0.04	7	540	4	<0.01	<2	1	41	0.06	<10	<10	17	<10	16
99MOB2021	MOB990171	408931	6911230	15	0.14	20	0.25	120	<1	0.03	8	530	6	<0.01	<2	1	37	0.06	<10	<10	17	<10	16
99MOB2023	MOB990172	409839	6910689	15	0.24	30	0.46	270	<1	0.05	19	600	8	<0.01	<2	3	46	0.07	<10	<10	22	<10	38
99MOB2025	MOB990173	410937	6909473	15	0.18	30	0.33	150	<1	0.03	10	550	4	<0.01	<2	1	41	0.06	<10	<10	19	<10	22
99MOB2027	MOB990174	350895	6883517	15	0.10	20	0.25	115	<1	0.03	7	580	216	0.04	<2	1	36	0.06	<10	<10	20	<10	128
99MOB2029	MOB990175	349732	6884943	15	0.12	20	0.31	170	<1	0.04	10	550	6	<0.01	<2	1	39	0.07	<10	<10	24	<10	22
99MOB2030	MOB990175	349732	6884943	15	0.11	20	0.29	145	<1	0.04	9	560	4	<0.01	<2	1	38	0.07	<10	<10	22	<10	22
99MOB2031	MOB990175	349732	6884943	15	0.12	20	0.30	145	<1	0.04	10	550	4	<0.01	<2	2	43	0.07	<10	<10	24	<10	20
99MOB2032	MOB990175	349732	6884943	15	0.10	20	0.28	130	<1	0.04	9	570	6	<0.01	<2	2	41	0.07	<10	<10	23	<10	18
99MOB2033	MOB990175	349732	6884943	15	0.08	30	0.24	115	<1	0.03	8	590	4	<0.01	<2	1	37	0.07	<10	<10	21	<10	16
99MOB2034	MOB990175	349732	6884943	15	0.08	20	0.22	100	<1	0.03	8	540	6	<0.01	<2	1	30	0.06	<10	<10	19	<10	16
99MOB2036	MOB990176	350750	6884039	15	0.12	30	0.28	115	<1	0.05	9	630	4	<0.01	<2	1	36	0.06	<10	<10	20	<10	18
99MOB2038	MOB990177	351670	6882871	15	0.22	30	0.41	165	<1	0.03	13	580	8	<0.01	<2	2	42	0.07	<10	<10	22	<10	28
99MOB2040	MOB990178	349262	6885450	15	0.15	30	0.31	150	<1	0.04	11	570	6	<0.01	<2	2	40	0.07	<10	<10	21	<10	20
99MOB2042	MOB990179	421097	6936957	15	0.07	10	0.26	90	<1	0.03	9	560	2	<0.01	<2	1	25	0.05	<10	<10	17	<10	14
99MOB2044	MOB990180	421422	6937243	15	1.23	<10	2.02	405	<1	0.03	15	470	<2	0.57	<2	9	9	0.29	<10	<10	137	<10	386
99MOB2046	MOB990181	422725	6935968	15	0.08	10	0.38	125	<1	0.03	16	510	6	<0.01	<2	2	25	0.06	<10	<10	22	<10	18
99MOB2048	MOB990182	421700	6935690	15	0.09	10	0.22	90	<1	0.04	7	490	4	<0.01	<2	1	29	0.05	<10	<10	16	<10	12
99MOB2049	MOB990182	421700	6935690	15	0.08	10	0.23	90	<1	0.03	7	480	2	<0.01	<2	1	24	0.04	<10	<10	16	<10	12
99MOB2050	MOB990182	421700	6935690	15	0.08	10	0.23	95	<1	0.03	7	500	2	<0.01	<2	1	28	0.05	<10	<10	18	<10	12
99MOB2051	MOB990182	421700	6935690	15	0.08	10	0.22	90	<1	0.03	7	510	4	<0.01	<2	1	26	0.05	<10	<10	17	<10	14
99MOB2052	MOB990182	421700	6935690	15	0.08	10	0.25	95	<1	0.03	8	490	4	<0.01	<2	1	26	0.05	<10	<10	18	<10	14
99MOB2053	MOB990182	421700	6935690	15	0.09	10	0.27	100	<1	0.03	7	500	2	<0.01	<2	1	27	0.05	<10	<10	18	<10	14
99MOB2054	MOB990182	421700	6935690	15	0.10	20	0.29	115	<1	0.04	9	510	6	<0.01	<2	1	30	0.06	<10	<10	20	<10	16
99MOB2073	MOB990197	387813	6902215	15	0.13	10	0.27	125	<1	0.02	7	580	8	0.05	<2	1	25	0.07	<10	<10	17	<10	200
99MOB2075	MOB990200	402332	6910418	15	0.12	20	0.26	105	<1	0.02	9	600	6	<0.01	<2	1	34	0.05	<10	<10	16	<10	18

*Hg analysed by CV-AAS, aqua regia digestion

Appendix IX
Till Geochemistry, <0.063 mm fraction, ICP-AES, aqua regia leach

Note:

Sample preparation:	dried sieve (230 mesh)
Analytical extraction:	Aqua Regia (HCL-HNO_3, 3:1)
Analytical method:	Inductively Coupled Plasma - Atomic Emission Spectrometry, Hg by Cold Vapor - Atomic Absorption Spectrometry
Laboratory:	Chemex Ltd.

Detection Limits:

Element	Detection limit	Element	Detection limit
Ag (ppm)	0.2	Mg (%)	0.01
Al (%)	0.01	Mn (ppm)	5
As (ppm)	2	Mo (ppm)	1
B (ppm)	10	Na (%)	0.01
Ba (ppm)	10	Ni (ppm)	1
Be (ppm)	0.5	P (ppm)	10
Bi (ppm)	2	Pb (ppm)	2
Ca (%)	0.01	S (%)	0.01
Cd (ppm)	0.5	Sb (ppm)	2
Co (ppm)	1	Sc (ppm)	1
Cr (ppm)	1	Sr (ppm)	1
Cu (ppm)	1	Ti (%)	0.01
Fe (%)	0.01	Tl (ppm)	10
Ga (ppm)	10	U (ppm)	10
Hg (ppb)	10	V (ppm)	1
K (%)	0.01	W (ppm)	10
La (ppm)	10	Zn (ppm)	2

Appendix IX: Geochemistry of Till (<0.063 mm fraction) by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb*	K %	La ppm	Mg %
97MOB0001	97MITE-1	388149	6913294	15	<0.2	0.22	<2	-	10	<0.5	<2	0.32	<0.5	1	11	5	0.90	<10	<10	0.03	20	0.09
97MOB0002	97MITE-1	388149	6913294	15	<0.2	0.24	<2	-	10	<0.5	<2	0.29	<0.5	1	11	6	0.81	<10	<10	0.04	10	0.10
97MOB0005	97MITE-2	389326	6912075	15	<0.2	1.61	2	-	160	0.5	<2	0.50	<0.5	6	35	32	1.84	<10	<10	0.44	40	0.66
97MOB0006	97MITE-2	389326	6912075	15	<0.2	1.90	2	-	190	0.5	<2	0.53	<0.5	7	39	36	2.03	<10	<10	0.51	40	0.77
97MOB0007	97MITE-2	389326	6912075	15	<0.2	1.99	2	-	200	0.5	<2	0.57	<0.5	7	42	36	2.11	<10	<10	0.56	40	0.79
97MOB0008	97MITE-2	389326	6912075	15	<0.2	1.70	4	-	180	0.5	<2	0.53	<0.5	6	36	32	1.94	<10	<10	0.47	40	0.68
97MOB0009	97MITE-2	389326	6912075	15	<0.2	1.49	<2	-	160	0.5	<2	0.52	<0.5	6	32	30	1.77	<10	<10	0.40	40	0.60
97MOB0010	97MITE-2	389326	6912075	15	<0.2	1.02	2	-	110	<0.5	<2	0.47	<0.5	5	26	18	1.49	<10	<10	0.26	30	0.44
97MOB0011	97MITE-2	389326	6912075	15	<0.2	0.45	<2	-	50	<0.5	<2	0.39	<0.5	3	16	8	1.05	<10	<10	0.10	20	0.20
97MOB0014	97MITE-A	389500	6911539	15	<0.2	0.31	<2	-	40	<0.5	<2	0.11	<0.5	1	9	5	0.44	<10	<10	0.08	10	0.11
97MOB0015	97MITE-3	390102	6911081	15	<0.2	0.41	2	-	30	<0.5	<2	0.34	<0.5	4	16	5	1.05	<10	<10	0.06	10	0.20
97MOB0016	97MITE-3	390102	6911081	15	<0.2	0.41	<2	-	30	<0.5	<2	0.35	<0.5	4	16	5	1.03	<10	<10	0.07	10	0.19
97MOB0017	97MITE-3	390102	6911081	15	<0.2	0.40	<2	-	30	<0.5	<2	0.35	<0.5	4	15	4	1.03	<10	<10	0.07	10	0.20
97MOB0018	97MITE-3	390102	6911081	15	<0.2	0.36	<2	-	30	<0.5	<2	0.37	<0.5	3	14	4	0.99	<10	<10	0.06	10	0.17
97MOB0019	97MITE-3	390102	6911081	15	<0.2	0.29	2	-	20	<0.5	<2	0.37	<0.5	2	13	4	0.96	<10	10	0.04	20	0.11
97MOB0023	97MITE-B	390237	6910960	15	<0.2	0.36	<2	-	40	<0.5	<2	0.39	<0.5	3	16	7	1.13	<10	<10	0.06	30	0.18
97MOB0024	97MITE-C	390567	6910751	15	<0.2	0.31	<2	-	30	<0.5	<2	0.32	<0.5	3	13	11	0.88	<10	<10	0.04	10	0.17
97MOB0025	97MITE-4	390745	6910178	15	<0.2	0.61	<2	-	70	<0.5	<2	0.34	<0.5	3	18	9	1.05	<10	<10	0.14	20	0.26
97MOB0026	97MITE-4	390745	6910178	15	<0.2	0.73	<2	-	80	<0.5	<2	0.35	<0.5	3	22	11	1.18	<10	<10	0.16	20	0.30
97MOB0027	97MITE-4	390745	6910178	15	<0.2	0.55	<2	-	60	<0.5	<2	0.37	<0.5	3	17	8	1.09	<10	<10	0.12	20	0.22
97MOB0028	97MITE-4	390745	6910178	15	<0.2	0.39	<2	-	40	<0.5	<2	0.33	<0.5	2	14	5	0.93	<10	<10	0.08	20	0.16
97MOB0029	97MITE-4	390745	6910178	15	<0.2	0.40	<2	-	40	<0.5	<2	0.36	<0.5	2	13	5	0.99	<10	<10	0.08	20	0.16
97MOB0033	97MITE-5	391464	6909375	15	<0.2	0.65	<2	-	70	<0.5	<2	0.39	<0.5	3	20	8	1.22	<10	<10	0.16	20	0.28
97MOB0034	97MITE-5	391464	6909375	15	<0.2	0.71	<2	-	70	<0.5	<2	0.39	<0.5	4	21	9	1.28	<10	<10	0.18	30	0.31
97MOB0035	97MITE-5	391464	6909375	15	<0.2	0.50	2	-	50	<0.5	<2	0.36	<0.5	2	17	6	1.08	<10	<10	0.12	20	0.21
97MOB0036	97MITE-5	391464	6909375	15	<0.2	1.46	<2	-	150	0.5	<2	0.44	<0.5	6	32	19	1.83	<10	<10	0.38	30	0.61
97MOB0037	97MITE-5	391464	6909375	15	<0.2	1.05	<2	-	110	0.5	<2	0.42	<0.5	4	26	13	1.53	<10	<10	0.26	30	0.44
97MOB0038	97MITE-5	391464	6909375	15	<0.2	0.76	<2	-	70	<0.5	<2	0.38	<0.5	4	20	9	1.25	<10	<10	0.16	20	0.33
97MOB0042	97MITE-6	392286	6908555	15	<0.2	0.98	2	-	90	<0.5	<2	0.43	<0.5	4	24	23	1.48	<10	<10	0.26	30	0.41
97MOB0043	97MITE-6	392286	6908555	15	<0.2	1.36	<2	-	130	0.5	<2	0.45	<0.5	5	30	25	1.77	<10	<10	0.37	30	0.56
97MOB0044	97MITE-6	392286	6908555	15	<0.2	1.37	2	-	140	0.5	<2	0.47	<0.5	5	31	24	1.81	<10	<10	0.37	30	0.58
97MOB0045	97MITE-6	392286	6908555	15	<0.2	0.66	<2	-	60	<0.5	<2	0.41	<0.5	3	21	10	1.26	<10	<10	0.16	30	0.29
97MOB0046	97MITE-6	392286	6908555	15	<0.2	0.31	<2	-	30	<0.5	<2	0.35	<0.5	2	13	4	0.91	<10	<10	0.06	20	0.14
97MOB0050	97MITE-7	392921	6907769	15	<0.2	0.91	<2	-	80	<0.5	<2	0.44	<0.5	4	29	16	1.53	<10	<10	0.22	30	0.38
97MOB0051	97MITE-7	392921	6907769	15	<0.2	0.97	2	-	80	<0.5	<2	0.43	<0.5	4	27	17	1.54	<10	<10	0.24	30	0.40
97MOB0052	97MITE-7	392921	6907769	15	<0.2	0.74	<2	-	70	<0.5	<2	0.41	<0.5	3	24	13	1.34	<10	<10	0.18	30	0.30
97MOB0053	97MITE-7	392921	6907769	15	<0.2	0.40	<2	-	30	<0.5	<2	0.33	<0.5	2	14	7	1.02	<10	<10	0.09	20	0.18
97MOB0054	97MITE-7	392921	6907769	15	<0.2	0.26	<2	-	20	<0.5	<2	0.32	<0.5	1	11	8	0.91	<10	<10	0.05	20	0.12
97MOB0058	97MITE-8	393721	6906996	15	<0.2	0.27	4	-	20	<0.5	<2	0.32	<0.5	3	12	6	0.90	<10	<10	0.05	20	0.13
97MOB0059	97MITE-8	393721	6906996	15	<0.2	0.28	2	-	20	<0.5	<2	0.35	<0.5	2	12	7	0.94	<10	<10	0.05	20	0.13
97MOB0060	97MITE-8	393721	6906996	15	<0.2	0.25	<2	-	10	<0.5	<2	0.34	<0.5	2	11	5	0.92	<10	<10	0.04	20	0.11
97MOB0061	97MITE-8	393721	6906996	15	<0.2	0.24	<2	-	10	<0.5	<2	0.33	<0.5	1	12	4	0.95	<10	<10	0.04	20	0.11
97MOB0062	97MITE-8	393721	6906996	15	<0.2	0.23	<2	-	10	<0.5	<2	0.35	<0.5	1	12	4	0.94	<10	10	0.04	20	0.10
97MOB0066	97MITE-9	394512	6906204	15	<0.2	0.35	<2	-	30	<0.5	<2	0.31	<0.5	3	13	3	0.98	<10	<10	0.04	20	0.15
97MOB0067	97MITE-9	394512	6906204	15	<0.2	0.26	<2	-	10	<0.5	<2	0.31	<0.5	1	11	2	0.90	<10	<10	0.03	10	0.10
97MOB0068	97MITE-9	394512	6906204	15	<0.2	0.29	2	-	10	<0.5	<2	0.35	<0.5	1	12	3	1.00	<10	<10	0.03	20	0.11
97MOB0069	97MITE-9	394512	6906204	15	<0.2	0.25	<2	-	10	<0.5	<2	0.32	<0.5	1	11	2	0.90	<10	<10	0.03	10	0.10
97MOB0070	97MITE-9	394512	6906204	15	<0.2	0.29	<2	-	10	<0.5	<2	0.30	<0.5	1	11	3	0.87	<10	<10	0.03	10	0.12
97MOB0074	97MITE-10	395217	6905369	15	<0.2	0.72	<2	-	60	<0.5	<2	0.41	<0.5	4	23	17	1.34	<10	<10	0.16	20	0.30

* Hg analysed by CV-AAS, aqua regia digestion

Appendix IX: Geochemistry of Till (<0.063 mm fraction)
by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0001	97MITE-1	388149	6913294	15	80	<1	<0.01	3	710	2	-	<2	1	35	0.04	<10	<10	15	<10	6
97MOB0002	97MITE-1	388149	6913294	15	60	<1	<0.01	4	670	<2	-	<2	1	33	0.04	<10	<10	14	<10	6
97MOB0005	97MITE-2	389326	6912075	15	190	<1	0.04	21	820	14	-	<2	4	62	0.08	<10	<10	28	<10	46
97MOB0006	97MITE-2	389326	6912075	15	215	<1	0.04	25	870	12	-	<2	4	70	0.09	<10	<10	31	<10	52
97MOB0007	97MITE-2	389326	6912075	15	225	<1	0.04	27	890	12	-	<2	4	75	0.10	<10	<10	32	<10	54
97MOB0008	97MITE-2	389326	6912075	15	200	<1	0.04	23	870	12	-	<2	4	68	0.09	<10	<10	31	<10	48
97MOB0009	97MITE-2	389326	6912075	15	180	<1	0.03	22	850	8	-	<2	4	63	0.09	<10	<10	28	<10	42
97MOB0010	97MITE-2	389326	6912075	15	150	<1	0.03	15	880	12	-	<2	3	54	0.08	<10	<10	25	<10	30
97MOB0011	97MITE-2	389326	6912075	15	95	<1	0.01	7	860	6	-	<2	1	40	0.05	<10	<10	18	<10	14
97MOB0014	97MITE-A	389500	6911539	15	45	<1	<0.01	4	230	2	-	<2	<1	13	0.03	<10	<10	8	<10	6
97MOB0015	97MITE-3	390102	6911081	15	105	<1	0.01	6	730	6	-	<2	1	35	0.06	<10	<10	20	<10	12
97MOB0016	97MITE-3	390102	6911081	15	100	<1	0.01	6	710	6	-	<2	1	37	0.06	<10	<10	19	<10	12
97MOB0017	97MITE-3	390102	6911081	15	100	<1	0.01	7	720	2	-	<2	1	37	0.06	<10	<10	19	<10	12
97MOB0018	97MITE-3	390102	6911081	15	85	<1	0.01	6	790	4	-	<2	1	37	0.05	<10	<10	18	<10	10
97MOB0019	97MITE-3	390102	6911081	15	75	<1	<0.01	4	840	2	-	<2	1	38	0.05	<10	<10	17	<10	8
97MOB0023	97MITE-B	390237	6910960	15	90	<1	0.01	6	870	6	-	<2	1	37	0.05	<10	<10	20	<10	12
97MOB0024	97MITE-C	390567	6910751	15	80	<1	0.01	6	760	2	-	<2	1	31	0.04	<10	<10	15	<10	10
97MOB0025	97MITE-4	390745	6910178	15	110	<1	0.01	9	820	6	-	<2	1	35	0.04	<10	<10	17	<10	18
97MOB0026	97MITE-4	390745	6910178	15	115	<1	0.01	11	810	6	-	<2	1	36	0.05	<10	<10	18	<10	22
97MOB0027	97MITE-4	390745	6910178	15	100	<1	0.01	8	830	6	-	<2	1	39	0.06	<10	<10	18	<10	16
97MOB0028	97MITE-4	390745	6910178	15	75	<1	0.01	6	800	2	-	<2	1	35	0.04	<10	<10	15	<10	10
97MOB0029	97MITE-4	390745	6910178	15	80	1	0.01	6	820	4	-	<2	1	38	0.05	<10	<10	16	<10	10
97MOB0033	97MITE-5	391464	6909375	15	105	<1	0.01	9	840	8	-	<2	1	44	0.06	<10	<10	19	<10	18
97MOB0034	97MITE-5	391464	6909375	15	110	<1	0.01	10	820	6	-	<2	1	45	0.07	<10	<10	20	<10	20
97MOB0035	97MITE-5	391464	6909375	15	90	<1	0.01	8	790	2	-	<2	1	40	0.06	<10	<10	17	<10	14
97MOB0036	97MITE-5	391464	6909375	15	180	<1	0.03	18	800	8	-	<2	3	59	0.09	<10	<10	27	<10	38
97MOB0037	97MITE-5	391464	6909375	15	150	<1	0.02	13	840	8	-	<2	3	52	0.08	<10	<10	23	<10	28
97MOB0038	97MITE-5	391464	6909375	15	125	<1	0.01	9	760	8	-	<2	2	46	0.07	<10	<10	20	<10	22
97MOB0042	97MITE-6	392286	6908555	15	140	<1	0.02	31	850	8	-	<2	3	53	0.07	<10	<10	22	<10	26
97MOB0043	97MITE-6	392286	6908555	15	170	<1	0.03	17	850	10	-	<2	3	59	0.08	<10	<10	25	<10	38
97MOB0044	97MITE-6	392286	6908555	15	180	<1	0.03	19	860	10	-	<2	3	60	0.08	<10	<10	26	<10	38
97MOB0045	97MITE-6	392286	6908555	15	115	<1	0.01	9	850	8	-	<2	2	49	0.06	<10	<10	20	<10	18
97MOB0046	97MITE-6	392286	6908555	15	70	<1	<0.01	5	820	2	-	<2	1	39	0.05	<10	<10	15	<10	10
97MOB0050	97MITE-7	392921	6907769	15	135	<1	0.03	14	870	8	-	<2	3	54	0.08	<10	<10	24	<10	28
97MOB0051	97MITE-7	392921	6907769	15	135	<1	0.03	13	840	8	-	<2	3	54	0.08	<10	<10	24	<10	28
97MOB0052	97MITE-7	392921	6907769	15	115	<1	0.02	11	820	8	-	<2	2	49	0.07	<10	<10	20	<10	20
97MOB0053	97MITE-7	392921	6907769	15	75	<1	0.01	6	780	4	-	<2	1	37	0.04	<10	<10	15	<10	12
97MOB0054	97MITE-7	392921	6907769	15	60	<1	0.01	4	840	2	-	<2	1	33	0.04	<10	<10	14	<10	8
97MOB0058	97MITE-8	393721	6906996	15	70	<1	0.01	5	780	6	-	<2	1	34	0.04	<10	<10	14	<10	10
97MOB0059	97MITE-8	393721	6906996	15	70	<1	0.01	6	800	4	-	<2	1	40	0.05	<10	<10	15	<10	10
97MOB0060	97MITE-8	393721	6906996	15	65	<1	0.01	4	740	2	-	<2	1	39	0.05	<10	<10	14	<10	8
97MOB0061	97MITE-8	393721	6906996	15	65	<1	<0.01	4	780	4	-	<2	1	37	0.04	<10	<10	15	<10	8
97MOB0062	97MITE-8	393721	6906996	15	65	<1	<0.01	4	850	2	-	<2	1	39	0.04	<10	<10	14	<10	8
97MOB0066	97MITE-9	394512	6906204	15	75	<1	0.01	5	780	4	-	<2	1	34	0.05	<10	<10	15	<10	10
97MOB0067	97MITE-9	394512	6906204	15	55	<1	<0.01	3	850	2	-	<2	<1	34	0.04	<10	<10	14	<10	6
97MOB0068	97MITE-9	394512	6906204	15	70	<1	<0.01	4	880	4	-	<2	1	40	0.05	<10	<10	15	<10	8
97MOB0069	97MITE-9	394512	6906204	15	60	<1	<0.01	3	800	2	-	<2	1	36	0.04	<10	<10	14	<10	6
97MOB0070	97MITE-9	394512	6906204	15	65	<1	<0.01	3	730	4	-	<2	1	34	0.04	<10	<10	13	<10	8
97MOB0074	97MITE-10	395217	6905369	15	120	<1	0.01	12	800	4	-	<2	2	46	0.07	<10	<10	20	<10	20

* Hg analysed by CV-AAS, aqua regia digestion

Appendix IX: Geochemistry of Till (<0.063 mm fraction) by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb*	K %	La ppm	Mg %.
97MOB0075	97MITE-10	395217	6905369	15	<0.2	0.53	2	-	50	<0.5	<2	0.37	<0.5	3	17	13	1.20	<10	<10	0.12	20	0.24
97MOB0076	97MITE-10	395217	6905369	15	<0.2	0.38	<2	-	30	<0.5	<2	0.35	<0.5	2	15	8	1.07	<10	<10	0.08	20	0.16
97MOB0077	97MITE-10	395217	6905369	15	<0.2	0.43	<2	-	40	<0.5	<2	0.39	<0.5	2	15	9	1.15	<10	<10	0.09	20	0.18
97MOB0078	97MITE-10	395217	6905369	15	<0.2	0.32	2	-	20	<0.5	<2	0.38	<0.5	2	13	5	1.02	<10	<10	0.06	20	0.14
97MOB0079	97MITE-10	395217	6905369	15	<0.2	0.28	2	-	20	<0.5	<2	0.34	<0.5	1	11	5	0.89	<10	<10	0.05	20	0.12
97MOB0080	97MITE-10	395217	6905369	15	<0.2	0.32	<2	-	20	<0.5	<2	0.37	<0.5	2	13	6	0.95	<10	<10	0.05	20	0.14
97MOB0084	97MITE-E	379569	6909418	15	<0.2	1.68	<2	-	160	0.5	<2	0.50	<0.5	7	39	25	2.13	<10	<10	0.42	40	0.69
97MOB0085	97MITE-F	380429	6908638	15	<0.2	0.51	<2	-	40	<0.5	<2	0.36	<0.5	3	16	5	1.14	<10	<10	0.10	20	0.23
97MOB0086	97MITE-G	380484	6908190	15	<0.2	0.72	<2	-	60	<0.5	<2	0.40	<0.5	4	23	17	1.29	<10	<10	0.17	30	0.29
97MOB0087	97MITE-H	403250	6914400	15	<0.2	0.31	<2	-	20	<0.5	<2	0.34	<0.5	2	13	4	0.97	<10	<10	0.05	10	0.15
97MOB0088	97MITE-I	374031	6900295	15	<0.2	0.55	<2	-	40	<0.5	<2	0.26	<0.5	6	19	19	1.28	<10	<10	0.07	30	0.26
97MOB0089	97MITE-J	375392	6899236	15	<0.2	0.51	2	-	30	<0.5	<2	0.43	<0.5	4	20	11	1.35	<10	<10	0.07	30	0.27
97MOB0090	97MITE-K	376942	6897863	15	<0.2	1.60	<2	-	140	0.5	<2	0.48	<0.5	7	38	30	2.14	<10	<10	0.39	40	0.69
99MOB2001	MOB990164	404026	6916661	15	<0.2	0.29	<2	<10	20	<0.5	<2	0.27	<0.5	3	14	8	0.86	<10	<10	0.04	20	0.16
99MOB2003	MOB990165	404454	6915898	15	<0.2	0.33	<2	10	30	<0.5	<2	0.32	<0.5	3	13	8	1.08	<10	<10	0.05	30	0.18
99MOB2005	MOB990166	405045	6914929	15	<0.2	0.67	<2	10	60	<0.5	<2	0.37	<0.5	5	20	27	1.37	<10	<10	0.15	30	0.39
99MOB2007	MOB990167	402005	6914817	15	<0.2	0.89	<2	10	110	<0.5	<2	0.58	<0.5	6	26	26	1.40	<10	10	0.18	60	0.41
99MOB2008	MOB990167	402005	6914817	15	<0.2	0.44	2	10	40	<0.5	<2	0.31	<0.5	3	18	5	1.15	<10	10	0.08	30	0.24
99MOB2009	MOB990167	402005	6914817	15	<0.2	0.70	<2	<10	70	<0.5	<2	0.34	<0.5	4	25	13	1.26	<10	<10	0.13	40	0.36
99MOB2010	MOB990167	402005	6914817	15	<0.2	0.44	<2	<10	40	<0.5	<2	0.30	<0.5	3	16	7	0.93	<10	<10	0.09	20	0.25
99MOB2011	MOB990167	402005	6914817	15	<0.2	0.52	<2	<10	50	<0.5	<2	0.34	<0.5	4	17	7	1.11	<10	<10	0.10	30	0.30
99MOB2012	MOB990167	402005	6914817	15	<0.2	0.45	2	<10	40	<0.5	<2	0.34	<0.5	4	16	5	1.16	<10	<10	0.09	30	0.27
99MOB2014	MOB990167	402005	6914817	15	<0.2	0.48	2	10	40	<0.5	<2	0.39	<0.5	4	18	9	1.25	<10	<10	0.12	30	0.25
99MOB2015	MOB990168	405610	6914374	15	<0.2	0.70	10	10	70	<0.5	<2	0.41	<0.5	4	19	14	1.43	<10	<10	0.18	30	0.34
99MOB2017	MOB990169	407108	6913055	15	0.8	0.35	74	<10	90	<0.5	<2	0.09	<0.5	4	16	20	6.21	<10	10	0.18	<10	0.20
99MOB2019	MOB990170	408214	6911942	15	<0.2	0.40	2	10	30	<0.5	<2	0.37	<0.5	3	18	10	1.15	<10	<10	0.09	30	0.22
99MOB2021	MOB990171	408931	6911230	15	<0.2	0.45	2	10	40	<0.5	<2	0.38	<0.5	3	19	12	1.20	<10	<10	0.10	30	0.23
99MOB2023	MOB990172	409839	6910689	15	<0.2	0.85	6	10	90	<0.5	<2	0.47	<0.5	7	27	28	1.74	<10	<10	0.18	30	0.42
99MOB2025	MOB990173	410937	6909473	15	<0.2	0.79	6	10	80	<0.5	<2	0.41	<0.5	5	25	19	1.49	<10	<10	0.20	30	0.39
99MOB2027	MOB990174	350895	6883517	15	1.2	0.36	<2	10	20	<0.5	<2	0.32	<0.5	3	20	30	1.48	<10	<10	0.05	20	0.17
99MOB2029	MOB990175	349732	6884943	15	<0.2	0.44	<2	10	30	<0.5	<2	0.31	<0.5	5	22	14	1.24	<10	<10	0.06	20	0.21
99MOB2030	MOB990175	349732	6884943	15	<0.2	0.47	8	10	30	<0.5	<2	0.31	<0.5	6	24	14	1.27	<10	<10	0.06	20	0.23
99MOB2031	MOB990175	349732	6884943	15	<0.2	0.47	6	<10	40	<0.5	<2	0.33	<0.5	6	25	15	1.29	<10	<10	0.06	30	0.25
99MOB2032	MOB990175	349732	6884943	15	<0.2	0.37	4	<10	30	<0.5	<2	0.32	<0.5	3	17	9	1.13	<10	<10	0.04	20	0.18
99MOB2033	MOB990175	349732	6884943	15	<0.2	0.34	2	<10	20	<0.5	<2	0.32	<0.5	3	16	7	1.07	<10	<10	0.04	20	0.15
99MOB2034	MOB990175	349732	6884943	15	<0.2	0.34	<2	<10	20	<0.5	<2	0.31	<0.5	3	15	8	1.03	<10	<10	0.04	30	0.16
99MOB2036	MOB990176	350750	6884039	15	<0.2	0.49	<2	10	40	<0.5	<2	0.30	<0.5	4	18	9	1.15	<10	<10	0.10	30	0.25
99MOB2038	MOB990177	351670	6882871	15	<0.2	0.90	<2	10	90	<0.5	<2	0.35	<0.5	6	28	25	1.62	<10	<10	0.24	30	0.46
99MOB2040	MOB990178	349262	6885450	15	<0.2	0.64	<2	10	50	<0.5	<2	0.37	<0.5	5	22	16	1.39	<10	<10	0.15	30	0.34
99MOB2042	MOB990179	421097	6936957	15	<0.2	0.30	2	10	20	<0.5	<2	0.29	<0.5	3	15	6	1.01	<10	<10	0.04	20	0.17
99MOB2044	MOB990180	421422	6937243	15	<0.2	3.63	16	<10	260	<0.5	<2	0.11	0.5	7	171	154	7.25	10	<10	1.79	<10	3.01
99MOB2046	MOB990181	422725	6935968	15	<0.2	0.53	6	10	30	<0.5	<2	0.33	<0.5	4	20	40	1.30	<10	<10	0.11	20	0.30
99MOB2048	MOB990182	421700	6935690	15	<0.2	0.28	<2	10	30	<0.5	<2	0.29	<0.5	3	14	6	1.03	<10	<10	0.04	10	0.15
99MOB2049	MOB990182	421700	6935690	15	<0.2	0.44	<2	10	30	<0.5	<2	0.34	<0.5	5	23	8	1.31	<10	<10	0.07	20	0.24
99MOB2050	MOB990182	421700	6935690	15	<0.2	0.32	<2	10	30	<0.5	<2	0.31	<0.5	3	15	6	1.15	<10	<10	0.05	10	0.17
99MOB2051	MOB990182	421700	6935690	15	<0.2	0.33	<2	10	30	<0.5	<2	0.31	<0.5	3	16	6	1.17	<10	<10	0.05	20	0.18
99MOB2052	MOB990182	421700	6935690	15	<0.2	0.38	<2	10	40	<0.5	<2	0.31	<0.5	4	18	7	1.21	<10	<10	0.06	20	0.21
99MOB2053	MOB990182	421700	6935690	15	<0.2	0.42	4	10	30	<0.5	<2	0.31	<0.5	4	19	6	1.11	<10	<10	0.06	30	0.22
99MOB2054	MOB990182	421700	5935690	15	<0.2	0.39	6	10	40	<0.5	<2	0.30	<0.5	3	19	7	1.12	<10	<10	0.06	30	0.21
99MOB2073	MOB990197	387813	6902215	15	0.2	0.68	<2	10	60	<0.5	<2	0.14	<0.5	4	25	15	3.79	<10	<10	0.13	10	0.27
99MOB2075	MOB990200	402332	6910418	15	<0.2	0.60	8	10	50	<0.5	<2	0.43	<0.5	4	21	15	1.37	<10	<10	0.13	30	0.27

* Hg analysed by CV-AAS, aqua regia digestion

Appendix IX: Geochemistry of Till (<0.063 mm fraction) by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0075	97MITE-10	395217	6905369	15	95	1	0.01	9	840	6	-	<2	1	38	0.06	<10	<10	17	<10	16
97MOB0076	97MITE-10	395217	6905369	15	75	<1	0.01	5	790	2	-	<2	1	37	0.05	<10	<10	16	<10	12
97MOB0077	97MITE-10	395217	6905369	15	80	<1	0.01	6	830	6	-	<2	1	42	0.06	<10	<10	17	<10	12
97MOB0078	97MITE-10	395217	6905369	15	75	<1	0.01	5	800	2	-	<2	1	43	0.06	<10	<10	16	<10	10
97MOB0079	97MITE-10	395217	6905369	15	65	<1	<0.01	4	750	2	-	<2	1	38	0.05	<10	<10	13	<10	8
97MOB0080	97MITE-10	395217	6905369	15	75	<1	<0.01	5	830	2	-	<2	1	40	0.05	<10	<10	14	<10	10
97MOB0084	97MITE-E	379569	6909418	15	235	<1	0.03	23	840	12	-	<2	4	69	0.10	<10	<10	30	<10	44
97MOB0085	97MITE-F	380429	6908638	15	100	<1	0.01	6	880	6	-	<2	1	43	0.06	<10	<10	18	<10	14
97MOB0086	97MITE-G	380494	6908190	15	120	<1	0.01	13	820	8	-	<2	1	48	0.06	<10	<10	18	<10	20
97MOB0087	97MITE-H	403250	6914400	15	70	<1	<0.01	4	890	4	-	<2	1	37	0.04	<10	<10	15	<10	10
97MOB0088	97MITE-I	374031	6900295	15	190	<1	<0.01	9	630	6	-	<2	1	28	0.08	<10	<10	18	<10	16
97MOB0089	97MITE-J	375392	6899236	15	120	<1	0.01	9	870	8	-	<2	1	48	0.06	<10	<10	21	<10	14
97MOB0090	97MITE-K	376942	6897863	15	235	<1	0.03	24	780	8	-	<2	4	61	0.10	<10	<10	29	<10	44
99MOB2001	MOB990164	404026	6916661	15	80	<1	<0.01	6	790	4	<0.01	<2	<1	22	0.03	<10	<10	13	<10	10
99MOB2003	MOB990165	404454	6915898	15	90	<1	0.01	6	860	4	<0.01	<2	<1	27	0.04	<10	<10	15	<10	12
99MOB2005	MOB990166	405045	6914929	15	140	<1	0.01	12	830	4	<0.01	<2	1	33	0.05	<10	<10	19	<10	22
99MOB2007	MOB990167	402005	6914817	15	140	<1	0.02	15	750	6	0.05	<2	2	49	0.04	<10	<10	22	<10	24
99MOB2008	MOB990167	402005	6914817	15	75	<1	0.01	7	800	2	<0.01	<2	1	30	0.05	<10	<10	19	<10	14
99MOB2009	MOB990167	402005	6914817	15	100	<1	0.01	12	660	6	0.02	<2	1	33	0.05	<10	<10	22	<10	22
99MOB2010	MOB990167	402005	6914817	15	75	<1	<0.01	8	820	4	0.01	<2	1	25	0.04	<10	<10	17	<10	18
99MOB2011	MOB990167	402005	6914817	15	90	<1	0.01	8	820	8	0.01	2	1	30	0.05	<10	<10	18	<10	20
99MOB2012	MOB990167	402005	6914817	15	90	<1	0.01	7	810	6	<0.01	<2	1	33	0.06	<10	<10	18	<10	16
99MOB2014	MOB990167	402005	6914817	15	105	<1	0.02	8	870	6	<0.01	<2	1	37	0.08	<10	<10	20	<10	18
99MOB2015	MOB990168	405610	6914374	15	130	<1	0.01	10	840	6	<0.01	<2	1	43	0.08	<10	<10	19	<10	20
99MOB2017	MOB990169	407108	6913055	15	70	8	0.02	8	720	26	0.51	2	1	20	0.07	<10	<10	19	<10	54
99MOB2019	MOB990170	408214	6911942	15	100	<1	0.01	7	810	4	<0.01	<2	1	35	0.05	<10	<10	17	<10	14
99MOB2021	MOB990171	408931	6911230	15	100	<1	0.01	8	830	6	<0.01	<2	1	37	0.06	<10	<10	18	<10	16
99MOB2023	MOB990172	409839	6910689	15	215	<1	0.02	17	750	6	<0.01	<2	2	38	0.08	<10	<10	21	<10	34
99MOB2025	MOB990173	410937	6909473	15	170	<1	0.02	12	790	6	<0.01	<2	2	39	0.08	<10	<10	20	<10	26
99MOB2027	MOB990174	350895	6883517	15	90	<1	0.01	6	810	254	0.03	<2	1	30	0.05	<10	<10	18	<10	48
99MOB2029	MOB990175	349732	6884943	15	120	<1	0.01	9	730	6	<0.01	<2	1	29	0.05	<10	<10	20	<10	16
99MOB2030	MOB990175	349732	6884943	15	125	<1	0.01	9	730	6	<0.01	<2	1	28	0.06	<10	<10	20	<10	18
99MOB2031	MOB990175	349732	6884943	15	125	<1	0.01	11	790	8	<0.01	<2	1	30	0.06	<10	<10	20	<10	18
99MOB2032	MOB990175	349732	6884943	15	85	<1	<0.01	7	760	6	<0.01	<2	1	28	0.05	<10	<10	18	<10	12
99MOB2033	MOB990175	349732	6884943	15	75	<1	<0.01	6	760	6	<0.01	<2	1	29	0.05	<10	<10	17	<10	10
99MOB2034	MOB990175	349732	6884943	15	75	<1	<0.01	6	730	4	<0.01	<2	1	28	0.05	<10	<10	16	<10	12
99MOB2036	MOB990176	350750	6884039	15	100	<1	0.04	8	740	4	<0.01	<2	1	30	0.05	<10	<10	18	<10	16
99MOB2038	MOB990177	351670	6882871	15	150	<1	0.01	16	710	8	<0.01	<2	2	34	0.06	<10	<10	23	<10	34
99MOB2040	MOB990178	349262	6885450	15	130	<1	0.02	12	780	4	<0.01	<2	1	31	0.06	<10	<10	21	<10	24
99MOB2042	MOB990179	421097	6936957	15	70	<1	0.01	6	800	4	<0.01	<2	1	23	0.05	<10	<10	17	<10	10
99MOB2044	MOB990180	421422	6937243	15	550	<1	0.04	19	470	<2	0.49	<2	12	7	0.36	<10	<10	186	<10	454
99MOB2046	MOB990181	422725	6935968	15	110	<1	0.02	14	710	2	<0.01	<2	1	26	0.06	<10	<10	22	<10	18
99MOB2048	MOB990182	421700	6935690	15	70	<1	0.01	7	780	6	<0.01	<2	<1	21	0.04	<10	<10	17	<10	10
99MOB2049	MOB990182	421700	6935690	15	120	<1	0.01	11	790	8	<0.01	<2	1	26	0.05	<10	<10	22	<10	14
99MOB2050	MOB990182	421700	6935690	15	80	<1	0.01	7	810	4	<0.01	<2	1	23	0.04	<10	<10	19	<10	10
99MOB2051	MOB990182	421700	6935690	15	85	<1	0.01	7	830	4	<0.01	<2	1	23	0.04	<10	<10	19	<10	12
99MOB2052	MOB990182	421700	6935690	15	95	<1	0.01	8	840	6	<0.01	<2	1	23	0.05	<10	<10	21	<10	14
99MOB2053	MOB990182	421700	6935690	15	95	<1	0.01	7	740	2	<0.01	<2	1	25	0.05	<10	<10	18	<10	12
99MOB2054	MOB990182	421700	6935690	15	95	<1	0.01	8	750	2	<0.01	<2	1	23	0.05	<10	<10	19	<10	14
99MOB2073	MOB990197	387813	6902215	15	115	<1	0.01	8	780	10	0.09	<2	2	18	0.08	<10	<10	19	<10	290
99MOB2075	MOB990200	402332	6910418	15	115	<1	0.01	9	830	6	<0.01	<2	1	44	0.08	<10	<10	19	<10	20

* Hg analysed by CV-AAS, aqua regia digestion

Appendix X
Till Geochemistry, <0.002 mm fraction,
ICP-AES, aqua regia leach

Note:

Sample preparation: centrifugation and decantation

Analytical extraction: Aqua Regia (HCL-HNO_3, 3:1)

Analytical method: Inductively Coupled Plasma - Atomic Emission Spectrometry, Hg by Cold Vapor - Atomic Absorption Spectrometry

Laboratory: Chemex Ltd.

Detection Limits:

Element	Detection limit	Element	Detection limit
Ag (ppm)	0.2	Mg (%)	0.01
Al (%)	0.01	Mn (ppm)	5
As (ppm)	2	Mo (ppm)	1
B (ppm)	10	Na (%)	0.01
Ba (ppm)	10	Ni (ppm)	1
Be (ppm)	0.5		
Bi (ppm)	2	Pb (ppm)	2
Ca (%)	0.01	S (%)	0.01
Cd (ppm)	0.5	Sb (ppm)	2
Co (ppm)	1	Sc (ppm)	1
Cr (ppm)	1	Sr (ppm)	1
Cu (ppm)	1	Ti (%)	0.01
Fe (%)	0.01	Tl (ppm)	10
Ga (ppm)	10	U (ppm)	10
Hg (ppb)	10	V (ppm)	1
K (%)	0.01	W (ppm)	10
La (ppm)	10	Zn (ppm)	2

Appendix X: Geochemistry of Till (<0.002 mm fraction) by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm*	K %	La ppm
97MOB0001	97MITE-1	388149	6913294	15	<0.2	1.34	4	-	90	0.5	<2	0.60	<0.5	11	50	53	5.00	<10	30	0.25	90
97MOB0002	97MITE-1	388149	6913294	15	<0.2	1.57	<2	-	120	0.5	<2	0.54	<0.5	11	47	70	3.76	<10	10	0.28	90
97MOB0005	97MITE-2	389326	6912075	15	<0.2	3.55	2	-	300	1.5	<2	0.74	<0.5	14	72	71	3.88	10	<10	1.02	70
97MOB0006	97MITE-2	389326	6912075	15	<0.2	3.59	6	-	310	1.5	<2	0.75	<0.5	13	73	71	3.91	10	<10	1.02	80
97MOB0007	97MITE-2	389326	6912075	15	<0.2	3.72	<2	-	330	1.5	<2	0.84	<0.5	13	73	71	3.94	10	10	1.03	80
97MOB0008	97MITE-2	389326	6912075	15	<0.2	3.44	2	-	320	1.5	<2	0.81	<0.5	13	69	68	3.78	10	<10	0.95	80
97MOB0009	97MITE-2	389326	6912075	15	<0.2	3.15	2	-	300	1.5	<2	0.75	<0.5	12	68	64	3.69	10	<10	0.88	80
97MOB0010	97MITE-2	389326	6912075	15	<0.2	2.65	<2	-	260	1.5	<2	0.67	<0.5	11	61	57	3.38	<10	<10	0.74	70
97MOB0011	97MITE-2	389326	6912075	15	<0.2	3.05	<2	-	270	1.5	<2	0.74	<0.5	13	67	55	3.70	10	<10	0.80	70
97MOB0014	97MITE-A	389500	6911539	15	<0.2	1.35	[illegible]	-	160	0.5	<2	0.27	<0.5	7	35	28	1.52	<10	<10	0.29	40
97MOB0015	97MITE-3	390102	6911081	15	<0.2	1.77	6	-	150	0.5	<2	0.49	<0.5	17	48	31	2.94	<10	<10	0.30	40
97MOB0016	97MITE-3	390102	6911081	15	<0.2	1.80	4	-	150	0.5	<2	0.53	<0.5	16	44	33	2.91	<10	<10	0.30	50
97MOB0017	97MITE-3	390102	6911081	15	<0.2	1.32	2	-	120	0.5	<2	0.42	<0.5	12	35	28	2.68	<10	<10	0.22	50
97MOB0018	97MITE-3	390102	6911081	15	<0.2	1.45	2	-	130	0.5	<2	0.47	<0.5	14	39	32	2.95	<10	<10	0.23	60
97MOB0019	97MITE-3	390102	6911081	15	<0.2	1.50	6	-	120	0.5	<2	0.56	<0.5	13	45	37	3.40	<10	<10	0.22	90
97MOB0023	97MITE-B	390237	6910960	15	<0.2	1.40	2	-	140	0.5	<2	0.67	<0.5	9	38	42	2.88	<10	10	0.24	90
97MOB0024	97MITE-C	390567	6910751	15	<0.2	1.47	<2	-	130	0.5	<2	0.64	<0.5	12	40	73	2.91	<10	10	0.22	60
97MOB0025	97MITE-4	390745	6910178	15	<0.2	2.52	2	-	260	1.5	<2	0.64	<0.5	12	59	37	3.46	10	<10	0.62	60
97MOB0026	97MITE-4	390745	6910178	15	<0.2	2.61	<2	-	270	1.5	<2	0.65	<0.5	12	61	39	3.46	<10	<10	0.63	60
97MOB0027	97MITE-4	390745	6910178	15	<0.2	2.34	2	-	250	1.0	<2	0.61	<0.5	11	57	37	3.37	<10	<10	0.54	60
97MOB0028	97MITE-4	390745	6910178	15	<0.2	2.30	2	-	250	1.5	<2	0.53	<0.5	12	60	42	3.75	<10	<10	0.56	70
97MOB0029	97MITE-4	390745	6910178	15	<0.2	2.35	<2	-	240	1.5	<2	0.56	<0.5	12	60	41	3.74	<10	<10	0.58	70
97MOB0033	97MITE-5	391464	6909375	15	<0.2	2.25	<2	-	250	1.0	<2	0.71	<0.5	11	56	30	3.15	<10	<10	0.58	60
97MOB0034	97MITE-5	391464	6909375	15	<0.2	2.74	4	-	290	1.0	<2	0.70	<0.5	12	60	35	3.28	10	<10	0.71	60
97MOB0035	97MITE-5	391464	6909375	15	<0.2	2.26	2	-	250	1.0	<2	0.66	<0.5	10	55	28	3.21	<10	<10	0.57	60
97MOB0036	97MITE-5	391464	6909375	15	<0.2	2.74	<2	-	310	1.5	<2	0.61	<0.5	12	66	38	3.36	10	<10	0.72	60
97MOB0037	97MITE-5	391464	6909375	15	<0.2	2.59	2	-	300	1.0	<2	0.61	<0.5	12	63	37	3.26	10	<10	0.66	60
97MOB0038	97MITE-5	391464	6909375	15	<0.2	2.44	<2	-	260	1.0	<2	0.53	<0.5	12	61	30	3.20	<10	<10	0.48	50
97MOB0042	97MITE-6	392286	6908555	15	<0.2	2.60	6	-	280	1.0	<2	0.68	<0.5	12	60	50	3.22	10	30	0.70	60
97MOB0043	97MITE-6	392286	6908555	15	<0.2	3.15	6	-	350	1.5	<2	0.73	<0.5	13	68	60	3.52	10	<10	0.84	70
97MOB0044	97MITE-6	392286	6908555	15	<0.2	2.74	4	-	300	1.0	<2	0.75	<0.5	12	64	48	3.31	10	<10	0.72	60
97MOB0045	97MITE-6	392286	6908555	15	<0.2	2.50	2	-	260	1.0	<2	0.70	<0.5	12	60	44	3.10	<10	30	0.64	60
97MOB0046	97MITE-6	392286	6908555	15	<0.2	2.17	<2	-	210	1.0	<2	0.69	<0.5	15	60	39	3.38	<10	10	0.50	60
97MOB0050	97MITE-7	392921	6907769	15	<0.2	2.64	2	-	270	1.0	<2	0.67	<0.5	13	65	52	3.43	10	<10	0.66	60
97MOB0051	97MITE-7	392921	6907769	15	<0.2	2.61	<2	-	270	1.0	<2	0.69	<0.5	13	66	53	3.47	10	<10	0.67	60
97MOB0052	97MITE-7	392921	6907769	15	<0.2	2.24	<2	-	230	1.0	<2	0.64	<0.5	12	57	45	3.20	<10	<10	0.57	50
97MOB0053	97MITE-7	392921	6907769	15	<0.2	2.32	2	-	220	1.0	<2	0.73	<0.5	12	62	42	3.66	<10	<10	0.54	50
97MOB0054	97MITE-7	392921	6907769	15	<0.2	2.07	4	-	170	1.0	<2	0.73	<0.5	12	62	46	4.33	<10	<10	0.48	70
97MOB0058	97MITE-8	393721	6906996	15	<0.2	1.84	6	-	160	0.5	<2	0.70	<0.5	12	50	47	2.81	<10	<10	0.42	60
97MOB0059	97MITE-8	393721	6906996	15	<0.2	1.34	<2	-	110	0.5	<2	0.63	<0.5	8	39	34	2.45	<10	<10	0.29	60
97MOB0060	97MITE-8	393721	6906996	15	<0.2	1.31	4	-	100	0.5	<2	0.70	<0.5	8	42	33	3.02	<10	<10	0.29	80
97MOB0061	97MITE-8	393721	6906996	15	<0.2	1.34	2	-	100	0.5	<2	0.68	0.5	10	41	34	3.22	<10	20	0.29	80
97MOB0062	97MITE-8	393721	6906996	15	<0.2	1.25	<2	-	90	0.5	<2	0.71	<0.5	10	40	34	3.34	<10	<10	0.26	70
97MOB0066	97MITE-9	394512	6906204	15	<0.2	2.25	2	-	210	1.5	<2	0.64	<0.5	16	57	37	3.45	<10	30	0.27	130
97MOB0067	97MITE-9	394512	6906204	15	<0.2	2.12	<2	-	150	1.0	<2	0.64	<0.5	13	48	27	3.41	<10	30	0.20	100
97MOB0068	97MITE-9	394512	6906204	15	<0.2	1.86	4	-	120	1.0	<2	0.60	0.5	14	51	28	3.67	<10	20	0.21	110
97MOB0069	97MITE-9	394512	6906204	15	<0.2	1.98	<2	-	120	1.0	<2	0.67	<0.5	12	59	29	4.21	<10	<10	0.23	110
97MOB0070	97MITE-9	394512	6906204	15	<0.2	2.02	8	-	120	1.0	<2	0.58	0.5	14	57	30	3.91	<10	30	0.22	100
97MOB0074	97MITE-10	395217	6905369	15	<0.2	3.14	<2	-	280	1.5	<2	0.77	<0.5	14	68	83	3.93	<10	<10	0.86	70
97MOB0075	97MITE-10	395217	6905369	15	<0.2	3.35	2	-	300	1.5	<2	0.79	<0.5	15	74	88	4.09	10	<10	0.82	70

*Hg analysed by CV-AAS, aqua regia digestion

Appendix X: Geochemistry of Till (<0.002 mm fraction)
by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0001	97MITE-1	388149	6913294	15	0.53	370	<1	0.25	24	38	-	<2	5	86	0.10	<10	<10	50	<10	44
97MOB0002	97MITE-1	388149	6913294	15	0.61	340	<1	0.22	26	32	-	<2	5	75	0.10	<10	<10	44	<10	48
97MOB0005	97MITE-2	389326	6912075	15	1.61	425	<1	0.64	46	24	-	<2	7	115	0.10	<10	<10	49	<10	112
97MOB0006	97MITE-2	389326	6912075	15	1.63	430	<1	0.65	50	24	-	<2	7	119	0.10	<10	<10	51	<10	112
97MOB0007	97MITE-2	389326	6912075	15	1.66	435	<1	0.08	48	28	-	<2	8	138	0.14	<10	<10	52	<10	110
97MOB0008	97MITE-2	389326	6912075	15	1.60	430	<1	0.07	49	22	-	<2	7	133	0.14	<10	<10	50	<10	106
97MOB0009	97MITE-2	389326	6912075	15	1.54	410	<1	0.13	46	26	-	<2	7	118	0.14	<10	<10	49	<10	102
97MOB0010	97MITE-2	389326	6912075	15	1.38	370	<1	0.12	41	22	-	<2	6	96	0.12	<10	<10	43	<10	92
97MOB0011	97MITE-2	389326	6912075	15	1.46	425	1	0.08	45	22	-	<2	7	118	0.15	<10	<10	49	<10	96
97MOB0014	97MITE-A	389500	6911539	15	0.46	205	<1	0.01	20	10	-	<2	4	39	0.08	<10	<10	27	<10	26
97MOB0015	97MITE-3	390102	6911081	15	0.75	445	<1	0.04	26	26	-	<2	4	70	0.13	<10	<10	43	<10	56
97MOB0016	97MITE-3	390102	6911081	15	0.75	430	<1	0.04	25	22	-	<2	4	78	0.14	<10	<10	42	<10	54
97MOB0017	97MITE-3	390102	6911081	15	0.58	340	<1	0.03	21	20	-	<2	3	50	0.10	<10	<10	36	<10	42
97MOB0018	97MITE-3	390102	6911081	15	0.61	375	<1	0.02	21	24	-	<2	4	60	0.12	<10	<10	40	<10	42
97MOB0019	97MITE-3	390102	6911081	15	0.56	380	<1	0.02	23	26	-	<2	4	76	0.15	<10	<10	48	<10	42
97MOB0023	97MITE-B	390237	6910960	15	0.63	320	<1	0.03	23	24	-	<2	4	86	0.13	<10	<10	41	<10	44
97MOB0024	97MITE-C	390567	6910751	15	0.70	365	<1	0.04	26	22	-	<2	4	78	0.13	<10	<10	41	<10	44
97MOB0025	97MITE-4	390745	6910178	15	1.22	405	<1	0.05	38	22	-	<2	6	97	0.15	<10	<10	48	<10	82
97MOB0026	97MITE-4	390745	6910178	15	1.28	405	<1	0.04	39	22	-	<2	6	97	0.15	<10	<10	49	<10	84
97MOB0027	97MITE-4	390745	6910178	15	1.14	380	<1	0.04	35	22	-	<2	6	85	0.14	<10	<10	48	<10	76
97MOB0028	97MITE-4	390745	6910178	15	1.18	375	<1	0.03	35	26	-	<2	6	71	0.12	<10	<10	43	<10	82
97MOB0029	97MITE-4	390745	6910178	15	1.18	380	<1	0.04	34	22	-	<2	6	82	0.13	<10	<10	45	<10	82
97MOB0033	97MITE-5	391464	6909375	15	1.18	370	<1	0.05	35	20	-	<2	6	97	0.14	<10	<10	48	<10	76
97MOB0034	97MITE-5	391464	6909375	15	1.35	390	<1	0.05	38	20	-	<2	6	104	0.14	<10	<10	49	<10	86
97MOB0035	97MITE-5	391464	6909375	15	1.15	355	<1	0.05	34	20	-	<2	6	92	0.14	<10	<10	47	<10	74
97MOB0036	97MITE-5	391464	6909375	15	1.44	410	<1	0.05	41	20	-	<2	6	84	0.14	<10	<10	50	<10	94
97MOB0037	97MITE-5	391464	6909375	15	1.38	395	<1	0.04	41	18	-	<2	6	77	0.13	<10	<10	49	<10	90
97MOB0038	97MITE-5	391464	6909375	15	1.15	380	<1	0.03	36	20	-	<2	5	82	0.12	<10	<10	49	<10	86
97MOB0042	97MITE-6	392286	6908555	15	1.36	390	<1	0.05	40	24	-	<2	6	88	0.13	<10	<10	47	<10	90
97MOB0043	97MITE-6	392286	6908555	15	1.52	435	<1	0.06	49	22	-	<2	7	103	0.13	<10	<10	51	<10	104
97MOB0044	97MITE-6	392286	6908555	15	1.42	420	<1	0.06	44	22	-	<2	7	100	0.15	<10	<10	52	<10	94
97MOB0045	97MITE-6	392286	6908555	15	1.32	400	<1	0.05	40	22	-	<2	6	95	0.14	<10	<10	49	<10	86
97MOB0046	97MITE-6	392286	6908555	15	1.15	390	1	0.04	38	24	-	<2	6	82	0.15	<10	<10	55	<10	80
97MOB0050	97MITE-7	392921	6907769	15	1.36	395	<1	0.06	42	22	-	<2	7	87	0.14	<10	<10	57	<10	94
97MOB0051	97MITE-7	392921	6907769	15	1.37	395	<1	0.06	43	22	-	<2	7	84	0.14	<10	<10	55	<10	96
97MOB0052	97MITE-7	392921	6907769	15	1.20	360	<1	0.05	37	22	-	<2	6	78	0.14	<10	<10	48	<10	82
97MOB0053	97MITE-7	392921	6907769	15	1.18	385	1	0.05	37	22	-	<2	6	94	0.17	<10	<10	55	<10	82
97MOB0054	97MITE-7	392921	6907769	15	1.03	385	1	0.04	35	32	-	<2	6	94	0.18	<10	<10	61	<10	72
97MOB0058	97MITE-8	393721	6906996	15	[illegible]	380	<1	0.04	34	22	-	<2	6	87	0.15	<10	<10	43	<10	72
97MOB0059	97MITE-8	393721	6906996	15	[illegible]	290	<1	0.04	25	20	-	<2	4	77	0.12	<10	<10	36	<10	50
97MOB0060	97MITE-8	393721	6906996	15	0.69	310	<1	0.04	21	22	-	<2	5	101	0.15	<10	<10	42	<10	48
97MOB0061	97MITE-8	393721	6906996	15	0.68	315	<1	0.03	22	22	-	<2	5	96	0.15	<10	<10	44	<10	48
97MOB0062	97MITE-8	393721	6906996	15	0.62	350	<1	0.03	21	24	-	<2	5	98	0.16	<10	<10	46	<10	46
97MOB0066	97MITE-9	394512	6906204	15	0.78	435	1	0.03	26	22	-	<2	5	98	0.14	<10	<10	59	<10	56
97MOB0067	97MITE-9	394512	6906204	15	0.70	345	<1	0.02	21	20	-	<2	5	94	0.15	<10	<10	56	<10	48
97MOB0068	97MITE-9	394512	6906204	15	0.66	375	<1	0.02	21	22	-	<2	5	90	0.17	<10	<10	56	<10	46
97MOB0069	97MITE-9	394512	6906204	15	0.70	400	1	0.02	23	26	-	<2	6	102	0.19	<10	<10	62	<10	48
97MOB0070	97MITE-9	394512	6906204	15	0.71	395	2	0.02	23	24	-	<2	6	90	0.18	<10	<10	62	<10	50
97MOB0074	97MITE-10	395217	6905369	15	1.44	440	<1	0.06	47	22	-	<2	8	109	0.17	<10	<10	56	<10	102
97MOB0075	97MITE-10	395217	6905369	15	1.53	455	1	0.06	49	20	-	<2	8	109	0.17	<10	<10	58	<10	110

[1] Hg analysed by CV AAS, aqua regia digestion

Appendix X: Geochemistry of Till (<0.002 mm fraction)
by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb*	K %	La ppm
97MOB0076	97MITE-10	395217	6905369	15	<0.2	3.79	<2	-	340	1.5	<2	0.79	0.5	17	79	98	4.28	10	<10	1.09	70
97MOB0077	97MITE-10	395217	6905369	15	<0.2	3.14	2	-	290	1.5	<2	0.79	<0.5	15	70	80	3.80	10	<10	0.89	70
97MOB0078	97MITE-10	395217	6905369	15	<0.2	1.38	<2	-	130	0.5	<2	0.62	<0.5	8	38	32	2.42	<10	20	0.34	50
97MOB0079	97MITE-10	395217	6905369	15	<0.2	2.12	<2	-	210	1.0	<2	0.80	<0.5	12	60	57	4.27	<10	30	0.51	80
97MOB0080	97MITE-10	395217	6905369	15	<0.2	2.38	<2	-	210	1.0	<2	0.63	<0.5	12	55	28	3.23	<10	10	0.54	60
97MOB0084	97MITE-E	379569	6909418	15	<0.2	2.24	<2	-	210	1.0	<2	0.77	0.5	15	64	57	4.10	<10	10	0.53	80
97MOB0085	97MITE-F	380429	6908638	15	<0.2	2.88	<2	-	290	1.5	<2	0.71	<0.5	12	65	42	3.46	<10	<10	0.79	70
97MOB0086	97MITE-G	380484	6908190	15	<0.2	2.95	<2	-	240	1.5	<2	0.78	<0.5	14	62	69	3.40	10	<10	0.80	60
97MOB0087	97MITE-H	403250	6914400	15	<0.2	3.36	<2	-	310	1.5	<2	0.76	<0.5	13	65	58	3.68	10	<10	1.00	80
97MOB0088	97MITE-I	374031	6900295	15	<0.2	3.02	<2		230	1.5	<2	0.60	<0.5	35	99	139	5.28	10	20	0.45	180
97MOB0089	97MITE-J	375392	6899236	15	<0.2	2.62	<2	-	190	1.5	<2	0.94	<0.5	21	76	101	4.67	<10	30	0.41	160
97MOB0090	97MITE-K	376942	6897863	15	<0.2	3.03	<2	-	280	1.5	<2	0.79	<0.5	15	69	54	3.60	10	<10	0.82	70
99MOB2001	MOB990164	404026	6916661	15	<0.2	2.26	6	10	120	0.5	<2	0.36	<0.5	18	70	98	4.27	<10	50	0.34	70
99MOB2003	MOB990165	404454	6915898	15	<0.2	1.93	2	10	120	0.5	<2	0.48	<0.5	17	47	61	3.66	<10	20	0.31	70
99MOB2005	MOB990166	405045	6914929	15	<0.2	2.41	<2	10	150	0.5	<2	0.56	<0.5	14	62	90	3.58	<10	<10	0.62	60
99MOB2007	MOB990167	402005	6914817	15	<0.2	3.07	6	20	240	1.0	<2	0.64	<0.5	14	68	65	3.62	10	40	0.68	70
99MOB2008	MOB990167	402005	6914817	15	<0.2	2.37	2	10	120	0.5	<2	0.25	<0.5	13	81	33	5.70	<10	<10	0.51	60
99MOB2009	MOB990167	402005	6914817	15	<0.2	2.21	12	10	140	0.5	<2	0.29	<0.5	12	69	31	3.42	<10	20	0.50	50
99MOB2010	MOB990167	402005	6914817	15	<0.2	2.57	12	10	180	0.5	<2	0.31	<0.5	14	79	42	4.26	<10	10	0.54	50
99MOB2011	MOB990167	402005	6914817	15	<0.2	2.61	<2	10	160	0.5	<2	0.32	<0.5	14	79	41	4.15	<10	10	0.56	50
99MOB2012	MOB990167	402005	6914817	15	<0.2	2.36	6	10	130	0.5	<2	0.35	<0.5	15	76	29	4.47	<10	10	0.56	50
99MOB2014	MOB990167	402005	6914817	15	<0.2	2.55	12	20	140	0.5	<2	0.55	<0.5	14	68	44	3.95	<10	<10	0.71	70
99MOB2015	MOB990168	405610	6914374	15	<0.2	2.78	<2	20	190	0.5	<2	0.59	<0.5	13	66	54	3.75	<10	<10	0.78	70
99MOB2017	MOB990169	407108	6913055	15	6.0	1.04	232	<10	80	<0.5	<2	0.11	<0.5	4	35	64	>15.00	<10	90	0.96	10
99MOB2019	MOB990170	408214	6911942	15	<0.2	1.95	8	10	100	0.5	<2	0.57	<0.5	12	53	55	3.33	<10	<10	0.51	60
99MOB2021	MOB990171	408931	6911230	15	<0.2	2.27	<2	10	150	0.5	<2	0.56	<0.5	13	59	62	3.61	<10	<10	0.61	60
99MOB2023	MOB990172	409839	6910689	15	<0.2	2.51	12	10	190	0.5	<2	0.53	<0.5	16	68	81	3.78	<10	<10	0.59	50
99MOB2025	MOB990173	410937	6909473	15	<0.2	2.51	6	10	180	0.5	<2	0.63	<0.5	13	71	62	3.78	<10	<10	0.72	60
99MOB2027	MOB990174	350895	6883517	15	21.4	2.03	10	<10	140	<0.5	<2	0.46	0.5	15	72	261	6.42	<10	100	0.42	50
99MOB2029	MOB990175	349732	6884943	15	<0.2	2.77	16	10	120	0.5	<2	0.46	<0.5	32	82	111	4.75	<10	20	0.42	60
99MOB2030	MOB990175	349732	6884943	15	<0.2	2.77	6	<10	120	0.5	<2	0.53	<0.5	29	85	107	4.78	<10	20	0.42	60
99MOB2031	MOB990175	349732	6884943	15	<0.2	2.06	2	10	90	0.5	<2	0.44	<0.5	21	72	78	3.96	<10	20	0.32	60
99MOB2032	MOB990175	349732	6884943	15	<0.2	2.66	8	<10	110	0.5	<2	0.33	<0.5	21	74	88	4.60	<10	20	0.37	60
99MOB2033	MOB990175	349732	6884943	15	<0.2	2.37	2	10	90	0.5	<2	0.38	<0.5	19	69	71	4.54	<10	20	0.35	60
99MOB2034	MOB990175	349732	6884943	15	<0.2	2.97	10	10	120	1.0	<2	0.39	<0.5	21	81	87	4.89	<10	30	0.43	70
99MOB2036	MOB990176	350750	6884039	15	<0.2	2.62	2	10	130	0.5	<2	0.35	<0.5	19	80	49	4.62	<10	<10	0.55	70
99MOB2038	MOB990177	351670	6882871	15	<0.2	2.87	10	10	180	1.0	<2	0.50	<0.5	16	78	66	4.21	10	<10	0.83	60
99MOB2040	MOB990178	349262	6885450	15	<0.2	2.47	2	<10	160	0.5	<2	0.56	<0.5	14	68	59	3.68	<10	<10	0.64	50
99MOB2042	MOB990179	421097	6936957	15	0.2	2.50	4	10	140	<0.5	<2	0.39	<0.5	20	81	70	5.49	<10	30	0.43	70
99MOB2044	MOB990180	421422	6937243	15	2.2	1.99	<2	10	200	<0.5	<2	0.18	<0.5	8	55	48	7.91	<10	<10	0.45	20
99MOB2046	MOB990181	422725	6935968	15	0.2	3.31	4	10	130	0.5	<2	0.40	<0.5	24	98	302	6.09	10	30	0.51	50
99MOB2048	MOB990182	421700	6935690	15	<0.2	2.41	2	10	170	<0.5	<2	0.43	<0.5	20	69	61	3.98	<10	<10	0.54	70
99MOB2049	MOB990182	421700	6935690	15	<0.2	2.47	2	10	180	0.5	<2	0.47	<0.5	26	73	55	4.15	<10	<10	0.54	70
99MOB2050	MOB990182	421700	6935690	15	<0.2	2.37	8	10	180	<0.5	<2	0.45	<0.5	24	71	52	4.19	<10	10	0.51	70
99MOB2051	MOB990182	421700	6935690	15	<0.2	2.28	4	<10	220	<0.5	<2	0.43	<0.5	24	67	48	4.05	<10	<10	0.50	70
99MOB2052	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2053	MOB990182	421700	6935690	15	<0.2	2.61	8	10	220	<0.5	<2	0.36	<0.5	23	96	61	5.23	<10	10	0.49	80
99MOB2054	MOB990182	421700	6935690	15	<0.2	2.75	20	10	220	0.5	<2	0.39	<0.5	20	93	75	5.42	<10	40	0.48	90
99MOB2073	MOB990197	387813	6902215	15	2.2	1.34	42	<10	50	<0.5	8	0.03	1	<1	146	373	>15.00	<10	70	3.15	<10
99MOB2075	MOB990200	402332	6910418	15	<0.2	2.74	8	10	160	0.5	<2	0.52	<0.5	15	84	74	3.89	10	10	0.68	60

*Hg analysed by CV-AAS, aqua regia digestion

Appendix X: Geochemistry of Till (<0.002 mm fraction)
by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0076	97MITE-10	395217	6905369	15	1.76	495	<1	0.07	55	20	-	<2	9	118	0.17	<10	<10	61	<10	126
97MOB0077	97MITE-10	395217	6905369	15	1.54	445	<1	0.06	46	16	-	<2	8	112	0.16	<10	<10	55	<10	110
97MOB0078	97MITE-10	395217	6905369	15	0.70	270	<1	0.03	21	14	-	<2	5	80	0.12	<10	<10	35	<10	50
97MOB0079	97MITE-10	395217	6905369	15	1.04	405	1	0.04	33	24	-	<2	7	107	0.18	<10	<10	59	<10	78
97MOB0080	97MITE-10	395217	6905369	15	1.06	375	<1	0.03	28	20	-	<2	6	93	0.14	<10	<10	50	<10	66
97MOB0084	97MITE-E	379569	6909418	15	1.11	435	<1	0.03	36	22	-	<2	7	98	0.18	<10	<10	62	<10	80
97MOB0085	97MITE-F	380429	6908638	15	1.36	415	<1	0.05	38	18	-	<2	7	108	0.16	<10	<10	52	<10	90
97MOB0086	97MITE-G	380484	6908190	15	1.31	430	<1	0.05	40	26	-	<2	7	111	0.16	<10	<10	49	<10	92
97MOB0087	97MITE-H	403250	6914400	15	1.49	420	<1	0.06	41	26	-	<2	8	124	0.15	<10	<10	51	<10	100
97MOB0088	97MITE-I	374031	6900295	15	1.11	1250	2	0.03	42	26	-	<2	9	83	0.19	<10	<10	81	<10	84
97MOB0089	97MITE-J	375392	6899236	15	1.04	655	1	0.03	46	38	-	<2	8	115	0.20	<10	<10	69	<10	68
97MOB0090	97MITE-K	376942	6897863	15	1.45	450	<1	0.06	43	14	-	<2	8	103	0.17	<10	<10	55	<10	96
99MOB2001	MOB990164	404026	6916661	15	0.82	555	<1	0.98	32	28	0.07	<2	5	48	0.11	<10	<10	62	<10	56
99MOB2003	MOB990165	404454	6915898	15	0.78	540	<1	0.91	26	28	0.02	<2	4	63	0.08	<10	<10	45	<10	52
99MOB2005	MOB990166	405045	6914929	15	1.34	420	<1	0.34	37	16	<0.01	<2	6	74	0.15	<10	<10	49	<10	82
99MOB2007	MOB990167	402005	6914817	15	1.19	305	<1	0.94	38	14	0.09	<2	6	74	0.07	<10	<10	54	<10	78
99MOB2008	MOB990167	402005	6914817	15	1.13	315	<1	1.24	33	16	0.04	4	5	41	0.09	<10	<10	86	<10	70
99MOB2009	MOB990167	402005	6914817	15	1.06	270	<1	1.06	31	12	0.04	<2	5	43	0.07	<10	<10	62	<10	68
99MOB2010	MOB990167	402005	6914817	15	1.13	295	<1	0.66	35	16	0.06	<2	6	46	0.09	<10	<10	73	<10	72
99MOB2011	MOB990167	402005	6914817	15	1.16	315	<1	0.56	35	12	0.05	<2	6	57	0.11	<10	<10	73	<10	74
99MOB2012	MOB990167	402005	6914817	15	1.26	355	<1	0.67	34	20	0.03	2	5	67	0.11	<10	<10	73	<10	76
99MOB2014	MOB990167	402005	6914817	15	1.35	410	<1	0.43	37	20	0.01	<2	7	90	0.15	<10	<10	60	<10	86
99MOB2015	MOB990168	405610	6914374	15	1.44	435	<1	0.43	38	16	<0.01	<2	7	89	0.14	<10	<10	50	<10	88
99MOB2017	MOB990169	407108	6913055	15	0.50	180	28	0.41	18	112	1.86	6	3	66	0.05	<10	<10	38	<10	140
99MOB2019	MOB990170	408214	6911942	15	1.01	355	<1	0.39	31	18	0.01	<2	5	74	0.12	<10	<10	43	<10	68
99MOB2021	MOB990171	408931	6911230	15	1.17	390	<1	0.37	36	16	<0.01	<2	6	76	0.14	<10	<10	48	<10	80
99MOB2023	MOB990172	409839	6910689	15	1.27	495	<1	0.49	45	16	<0.01	<2	7	62	0.11	<10	<10	42	<10	94
99MOB2025	MOB990173	410937	6909473	15	1.29	435	<1	0.38	37	16	<0.01	<2	7	81	0.14	<10	<10	47	<10	84
99MOB2027	MOB990174	350895	6883517	15	0.88	460	<1	0.68	29	2430	0.36	4	6	61	0.15	<10	<10	57	<10	254
99MOB2029	MOB990175	349732	6884943	15	1.15	785	<1	0.91	47	32	0.03	<2	6	55	0.12	<10	<10	65	<10	94
99MOB2030	MOB990175	349732	6884943	15	1.17	745	<1	0.64	45	30	0.03	<2	7	66	0.14	<10	<10	67	<10	94
99MOB2031	MOB990175	349732	6884943	15	0.92	510	<1	0.58	37	22	0.01	<2	5	49	0.11	<10	<10	54	<10	72
99MOB2032	MOB990175	349732	6884943	15	1.08	500	<1	0.61	42	24	0.04	<2	5	37	0.11	<10	<10	68	<10	78
99MOB2033	MOB990175	349732	6884943	15	0.97	485	<1	0.88	36	24	0.02	<2	5	43	0.10	<10	<10	63	<10	70
99MOB2034	MOB990175	349732	6884943	15	1.19	530	<1	0.73	44	26	0.04	<2	7	47	0.12	<10	<10	71	<10	100
99MOB2036	MOB990176	350750	6884039	15	1.24	400	<1	0.66	42	24	0.01	<2	7	56	0.12	<10	<10	71	<10	86
99MOB2038	MOB990177	351670	6882871	15	1.57	445	<1	0.41	47	20	<0.01	<2	8	64	0.19	<10	<10	58	<10	112
99MOB2040	MOB990178	349262	6885450	15	1.34	405	<1	0.46	42	14	<0.01	<2	7	62	0.13	<10	<10	53	<10	88
99MOB2042	MOB990179	421097	6936957	15	1.19	610	<1	0.91	40	26	0.07	2	6	59	0.13	<10	<10	81	<10	128
99MOB2044	MOB990180	421422	6937243	15	0.87	320	<1	0.42	24	32	0.2	<2	6	39	0.13	<10	<10	39	<10	590
99MOB2046	MOB990181	422725	6935968	15	1.48	565	<1	0.86	81	22	0.05	<2	7	48	0.15	<10	<10	101	<10	100
99MOB2048	MOB990182	421700	6935690	15	1.23	550	<1	1.34	45	22	0.02	<2	6	53	0.08	<10	<10	59	<10	84
99MOB2049	MOB990182	421700	6935690	15	1.27	675	<1	1.19	45	24	0.02	<2	6	59	0.10	<10	<10	63	<10	86
99MOB2050	MOB990182	421700	6935690	15	1.25	645	<1	0.76	42	22	0.02	<2	6	57	0.12	<10	<10	65	<10	82
99MOB2051	MOB990182	421700	6935690	15	1.19	660	<1	2.01	41	28	0.03	<2	6	51	0.07	<10	<10	62	<10	78
99MOB2052	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2053	MOB990182	421700	6935690	15	1.18	655	<1	1.64	42	28	0.05	<2	6	51	0.10	<10	<10	87	<10	80
99MOB2054	MOB990182	421700	6935690	15	1.14	580	<1	1.44	44	22	0.07	<2	7	53	0.12	<10	<10	89	<10	72
99MOB2073	MOB990197	387813	6902215	15	0.77	225	<1	0.63	10	6	>5.00	8	15	48	0.35	<10	<10	206	<10	346
99MOB2075	MOB990200	402332	6910418	15	1.53	460	<1	0.47	46	16	0.01	<2	7	80	0.15	<10	<10	54	<10	104

*Hg analysed by CV-AAS, aqua regia digestion

Appendix XI
Humus Geochemistry, <2 mm fraction, ICP-AES, aqua regia leach

Note:

Sample preparation: dry sieve (10 mesh)
Analytical digestion: Aqua Regia ($HCL-HNO_3$, 3:1)
Analytical method: Inductively Coupled Plasma - Atomic Emission Spectrometry, Hg by Cold Vapor - Atomic Absorption Spectrometry
Laboratory: Chemex Ltd.
Detection Limits:

Element	Detection limit	Element	Detection limit
Ag (ppm)	0.2	Mg (%)	0.01
Al (%)	0.01	Mn (ppm)	5
As (ppm)	2	Mo (ppm)	1
B (ppm)	10	Na (%)	0.01
Ba (ppm)	10	Ni (ppm)	1
Be (ppm)	0.5	P (ppm)	10
Bi (ppm)	2	Pb (ppm)	2
Ca (%)	0.01	S (%)	0.01
Cd (ppm)	0.5	Sb (ppm)	2
Co (ppm)	1	Sc (ppm)	1
Cr (ppm)	1	Sr (ppm)	1
Cu (ppm)	1	Ti (%)	0.01
Fe (%)	0.01	Tl (ppm)	10
Ga (ppm)	10	U (ppm)	10
Hg (ppb)	10	V (ppm)	1
K (%)	0.01	W (ppm)	10
La (ppm)	10	Zn (ppm)	2

Appendix XI: Geochemistry of Humus (<2 mm fraction) by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppb*	K %	La ppm
97MOB0003	97MITE-1	388149	6913294	15	<0.2	0.32	<2	-	50	<0.5	<2	0.24	<0.5	2	9	12	0.76	<10	60	0.07	20
97MOB0012	97MITE-2	389326	6912075	15	<0.2	0.80	<2	-	150	0.5	<2	0.55	<0.5	8	15	20	1.05	<10	140	0.20	30
97MOB0020	97MITE-3	390102	6911081	15	<0.2	0.37	<2	-	130	<0.5	<2	0.27	<0.5	5	9	9	0.74	<10	150	0.08	30
97MOB0030	97MITE-4	390745	6910178	15	<0.2	1.08	<2	-	150	0.5	<2	0.32	<0.5	8	23	21	1.49	<10	70	0.22	40
97MOB0039	97MITE-5	391464	6909375	15	<0.2	0.95	<2	-	190	0.5	<2	0.40	<0.5	8	17	18	1.23	<10	160	0.22	40
97MOB0047	97MITE-6	392286	6908555	15	<0.2	0.99	<2	-	180	0.5	<2	0.55	<0.5	27	24	22	1.65	<10	150	0.24	40
97MOB0055	97MITE-7	392921	6907769	15	<0.2	0.99	<2	-	180	0.5	<2	0.52	0.5	30	22	25	1.67	<10	100	0.22	50
97MOB0063	97MITE-8	393721	6906996	15	<0.2	0.25	<2	-	160	<0.5	<2	0.57	<0.5	4	3	13	0.94	<10	220	0.07	40
97MOB0071	97MITE-9	394512	6906204	15	<0.2	0.18	<2	-	90	<0.5	<2	0.71	<0.5	2	2	8	0.21	<10	80	0.02	10
97MOB0081	97MITE-10	395217	6905369	15	<0.2	0.24	<2	-	100	<0.5	<2	0.45	<0.5	5	4	10	0.66	<10	200	0.07	10
99MOB2002	MOB990164	404026	6916661	15	<0.2	0.09	<2	10	110	<0.5	<2	0.31	<0.5	2	2	6	0.15	<10	310	0.09	<10
99MOB2004	MOB990165	404454	6915898	15	<0.2	0.15	<2	10	140	<0.5	<2	0.56	<0.5	3	3	10	0.26	<10	260	0.14	10
99MOB2006	MOB990166	405045	6914929	15	<0.2	0.16	<2	10	120	<0.5	<2	1.89	0.5	3	4	70	0.24	<10	180	0.06	10
99MOB2013	MOB990167	402005	6914817	15	<0.2	0.16	<2	10	110	<0.5	<2	0.69	<0.5	3	3	8	0.22	<10	180	0.11	<10
99MOB2016	MOB990168	405610	6914374	15	<0.2	0.30	<2	10	110	<0.5	<2	0.25	<0.5	4	9	8	0.55	<10	190	0.06	10
99MOB2018	MOB990169	407108	6913055	15	<0.2	0.29	2	<10	60	<0.5	<2	0.83	1.0	18	2	20	0.49	<10	260	0.05	<10
99MOB2020	MOB990170	408214	6911942	15	<0.2	0.18	<2	10	100	<0.5	<2	1.02	<0.5	1	2	15	0.19	<10	230	0.07	10
99MOB2022	MOB990171	408931	6911230	15	<0.2	0.22	<2	10	110	<0.5	<2	0.29	<0.5	3	4	7	0.31	<10	230	0.11	<10
99MOB2024	MOB990172	409839	6910689	15	<0.2	0.09	<2	10	90	<0.5	<2	0.44	0.5	4	1	8	0.10	<10	240	0.07	<10
99MOB2026	MOB990173	410937	6909473	15	<0.2	0.13	<2	10	50	<0.5	<2	0.40	<0.5	<1	3	7	0.25	<10	190	0.05	<10
99MOB2035	MOB990175	349732	6884943	15	<0.2	0.10	<2	10	120	<0.5	<2	0.38	0.5	1	3	8	0.13	<10	330	0.05	<10
99MOB2037	MOB990176	350750	6884039	15	<0.2	0.61	<2	10	90	<0.5	<2	0.54	<0.5	4	17	13	1.10	<10	60	0.14	20
99MOB2039	MOB990177	351670	6882871	15	<0.2	0.26	2	10	110	<0.5	<2	0.37	<0.5	4	6	9	0.39	<10	190	0.13	<10
99MOB2041	MOB990178	349262	6885450	15	<0.2	0.19	<2	<10	90	<0.5	<2	0.28	<0.5	1	7	5	0.40	<10	110	0.04	<10
99MOB2043	MOB990179	421097	6936957	15	<0.2	0.19	<2	<10	60	<0.5	<2	0.83	0.5	4	6	22	0.36	<10	230	0.06	<10
99MOB2045	MOB990180	421422	6937243	15	<0.2	0.32	<2	<10	90	<0.5	<2	2.25	1.5	3	10	141	0.62	<10	110	0.06	10
99MOB2047	MOB990181	422725	6935968	15	<0.2	0.18	<2	<10	130	<0.5	<2	0.39	<0.5	4	5	6	0.20	<10	150	0.03	<10
99MOB2055	MOB990182	421700	6935690	15	<0.2	0.14	<2	10	100	<0.5	<2	1.09	<0.5	3	3	15	0.19	<10	70	0.04	<10
99MOB2074	MOB990197	387813	6902215	15	0.8	0.34	<2	<10	<10	<0.5	<2	0.05	<0.5	1	4	11	1.72	<10	<10	0.03	10
99MOB2076	MOB990200	402332	6910418	15	<0.2	0.05	2	<10	60	<0.5	<2	0.78	<0.5	1	1	8	0.08	<10	210	0.07	<10

* Hg analysed by CV-AAS, aqua regia digestion

Appendix XI: Geochemistry of Humus (<2 mm fraction)
by ICP-AES, aqua regia leach

Sample	Station ID	Easting	Northing	UTM	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	S %	Sb ppm	Sc ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0003	97MITE-1	388149	6913294	15	0.14	60	1	0.01	5	340	6	-	2	<1	32	0.03	<10	<10	10	<10	10
97MOB0012	97MITE-2	389326	6912075	15	0.34	255	<1	0.02	13	650	10	-	2	1	57	0.04	<10	<10	14	<10	40
97MOB0020	97MITE-3	390102	6911081	15	0.17	85	<1	0.01	8	500	8	-	<2	<1	39	0.03	<10	<10	9	<10	16
97MOB0030	97MITE-4	390745	6910178	15	0.44	310	2	0.01	16	410	6	-	2	2	43	0.05	<10	<10	18	<10	36
97MOB0039	97MITE-5	391464	6909375	15	0.32	1005	<1	0.01	13	670	8	-	<2	1	48	0.04	<10	<10	15	<10	44
97MOB0047	97MITE-6	392286	6908555	15	0.46	1015	1	0.01	17	580	12	-	2	2	62	0.05	<10	<10	22	<10	60
97MOB0055	97MITE-7	392921	6907769	15	0.44	1280	1	0.02	18	740	16	-	<2	2	61	0.05	<10	<10	23	<10	60
97MOB0063	97MITE-8	393721	6906996	15	0.12	70	<1	0.01	8	930	6	-	2	<1	55	<0.01	<10	<10	4	<10	28
97MOB0071	97MITE-9	394512	6906204	15	0.10	<5	<1	<0.01	4	660	<2	-	<2	<1	58	<0.01	<10	<10	2	<10	26
97MOB0081	97MITE-10	395217	6905369	15	0.08	75	<1	0.01	6	590	4	-	2	<1	34	<0.01	<10	<10	5	<10	28
99MOB2002	MOB990164	404026	6916661	15	0.09	310	1	0.01	3	870	4	0.14	<2	<1	23	<0.01	<10	<10	2	<10	58
99MOB2004	MOB990165	404454	6915898	15	0.15	715	<1	0.01	5	930	8	0.13	<2	<1	35	<0.01	<10	<10	4	<10	32
99MOB2006	MOB990166	405045	6914929	15	0.19	70	<1	0.01	48	550	2	0.20	<2	<1	55	<0.01	<10	<10	3	<10	142
99MOB2013	MOB990167	402005	6914817	15	0.15	50	1	0.01	7	610	6	0.13	<2	<1	53	<0.01	<10	<10	4	<10	32
99MOB2016	MOB990168	405610	6914374	15	0.12	30	<1	0.01	7	510	2	0.08	<2	<1	32	0.01	<10	<10	7	<10	28
99MOB2018	MOB990169	407108	6913055	15	0.03	65	1	<0.01	24	710	<2	0.19	<2	<1	28	<0.01	<10	<10	3	<10	64
99MOB2020	MOB990170	408214	6911942	15	0.22	20	<1	0.03	4	740	<2	0.15	<2	<1	47	<0.01	<10	<10	3	<10	16
99MOB2022	MOB990171	408931	6911230	15	0.10	30	<1	0.01	4	760	<2	0.12	<2	<1	33	0.01	<10	<10	3	<10	92
99MOB2024	MOB990172	409839	6910689	15	0.12	15	<1	0.01	6	620	<2	0.16	<2	<1	29	<0.01	<10	<10	<1	<10	138
99MOB2026	MOB990173	410937	6909473	15	0.10	10	<1	0.02	3	500	<2	0.13	<2	<1	32	0.01	<10	<10	3	<10	38
99MOB2035	MOB990175	349732	6884943	15	0.07	35	<1	<0.01	4	730	<2	0.16	<2	<1	27	<0.01	<10	<10	1	<10	46
99MOB2037	MOB990176	350750	6884039	15	0.31	95	<1	0.06	11	500	6	0.06	<2	1	42	0.05	<10	<10	16	<10	24
99MOB2039	MOB990177	351670	6882871	15	0.11	105	<1	0.01	7	750	2	0.10	<2	<1	37	0.01	<10	<10	5	<10	48
99MOB2041	MOB990178	349262	6885450	15	0.07	5	<1	0.01	5	650	2	0.11	<2	<1	23	0.01	<10	<10	5	<10	30
99MOB2043	MOB990179	421097	6936957	15	0.10	25	<1	<0.01	10	860	2	0.17	<2	<1	17	<0.01	<10	<10	4	<10	26
99MOB2045	MOB990180	421422	6937243	15	0.17	590	<1	<0.01	28	870	<2	0.23	<2	1	37	0.01	<10	<10	7	<10	204
99MOB2047	MOB990181	422725	6935968	15	0.14	5	<1	0.02	11	570	<2	0.16	<2	<1	38	<0.01	<10	<10	3	<10	60
99MOB2055	MOB990182	421700	6935690	15	0.06	20	<1	<0.01	8	630	<2	0.16	<2	<1	34	<0.01	<10	<10	3	<10	16
99MOB2074	MOB990197	387813	6902215	15	0.02	10	<1	<0.01	3	550	2	0.14	<2	<1	5	<0.01	<10	<10	4	<10	12
99MOB2076	MOB990200	402332	6910418	15	0.06	45	<1	<0.01	4	560	<2	0.13	<2	<1	42	<0.01	<10	<10	<1	<10	10

* Hg analysed by CV-AAS, aqua regia digestion

Appendix XII
Geochemistry of Peat, crushed,
ICP-AES, nitric-perchloric acid digestion

Note:

Sample preparation:	oven-dried (28°C); crushed in blender
Analytical extraction:	Nitric-Perchloric
Analytical method:	Inductively Coupled Plasma - Atomic Emission Spectrometry, As, La, Sb and W analysed by INAA Hg (ppb) by Cold Vapor - Atomic Absorption Spectrometry, aqua regia leach
Laboratory:	Chemex Ltd.

Detection Limits:

Element	Detection limit	Element	Detection limit
Ag (ppm)	0.1	Mn (ppm)	1
Al (ppm)	50	Mo (ppm)	0.5
As (ppm)	2	Na (ppm)	50
Ba (ppm)	5	Ni (ppm)	0.5
Be (ppm)	0.2	P (ppm)	5
Bi (ppm)	1	Pb (ppm)	0.5
Ca (ppm)	50	Sb (ppm)	2
Cd (ppm)	0.2	Sc (ppm)	2
Co (ppm)	0.5	Sr (ppm)	0.5
Cr (ppm)	0.5	Ti (ppm)	50
Cu (ppm)	0.5	Tl (ppm)	5
Fe (ppm)	50	U (ppm)	5
Ga (ppm)	5	V (ppm)	0.5
Hg (ppm)	1	W (ppm)	2
Hg (ppb)	10	Zn (ppm)	0.5
K (ppm)	50		
La (ppm)	5		
Mg (ppm)	50		

Appendix XII: Geochemistry of Peat
by ICP-AES, nitric-perchloric acid digestion

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm*	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe ppm	Ga ppm	Hg ppb**	Hg ppm	K ppm	La ppm*
99MOB2056	MOB990186	377190	6901086	15	<0.1	200	<2	45	<0.2	<1	5000	<0.2	<0.5	0.5	4.5	450	<5	260	<1	750	<5
99MOB2057	MOB990186	377190	6901086	15	<0.1	150	<2	20	<0.2	<1	3300	<0.2	0.5	<0.5	2.5	300	<5	150	<1	450	<5
99MOB2058	MOB990186	377190	6901086	15	<0.1	900	4	65	<0.2	1	6800	<0.2	3.5	2.0	4.5	1750	<5	100	<1	550	<5
99MOB2059	MOB990186	377190	6901086	15	<0.1	900	2	45	<0.2	1	5500	0.6	2.5	2.5	3.0	2000	<5	110	<1	550	5
99MOB2060	MOB990186	377190	6901086	15	<0.1	2300	<2	145	0.2	<1	7200	<0.2	3.5	4.5	3.5	5400	<5	70	<1	250	20
99MOB2061	MOB990187	377719	6905809	15	0.3	400	<2	5	<0.2	1	600	0.2	<0.5	0.5	2.0	350	<5	150	<1	350	<5
99MOB2062	MOB990187	377719	6905809	15	<0.1	1050	<2	10	<0.2	1	850	0.2	0.5	1.5	2.0	1500	<5	70	<1	300	<5
99MOB2063	MOB990187	377719	6905809	15	0.1	1500	2	25	<0.2	1	1000	<0.2	0.5	6.0	8.5	3000	<5	80	<1	200	5
99MOB2064	MOB990189	377381	6914460	15	<0.1	500	2	40	<0.2	1	2400	0.2	1.5	0.5	3.5	1550	<5	200	<1	700	<5
99MOB2065	MOB990189	377381	6914460	15	0.1	2100	<2	95	<0.2	1	3400	<0.2	2.5	3.5	<0.5	11900	<5	40	<1	350	10
99MOB2066	MOB990190	382543	6910120	15	<0.1	50	2	5	<0.2	<1	550	<0.2	<0.5	<0.5	2.0	200	<5	100	<1	800	<5
99MOB2067	MOB990190	382543	6910120	15	<0.1	200	2	5	<0.2	<1	1150	<0.2	0.5	<0.5	2.0	550	<5	60	<1	800	<5
99MOB2068	MOB990190	382543	6910120	15	0.1	2300	6	65	<0.2	1	2100	<0.2	2.5	3.5	3.0	4400	<5	50	<1	600	15
99MOB2069	MOB990190	382543	6910120	15	0.2	4600	8	70	0.2	1	1050	<0.2	1.0	14.5	3.5	8600	<5	30	<1	600	20
99MOB2070	MOB990192	387667	6911517	15	<0.1	350	<2	20	<0.2	1	1700	0.2	1.5	0.5	1.5	2200	<5	180	<1	500	<5
99MOB2071	MOB990192	387667	6911517	15	0.2	1950	6	45	<0.2	1	1400	<0.2	2.5	4.0	<0.5	16900	<5	70	<1	350	20
99MOB2072	MOB990192	387667	6911517	15	0.2	2800	8	35	<0.2	1	950	<0.2	1.0	8.0	2.0	13700	<5	80	<1	300	25

*As, La, Sb and W analysed by INAA

** Hg analysed by CV-AAS, aqua regia digestion

Appendix XII: Geochemistry of Peat
by ICP-AES, nitric-perchloric acid digestion

Sample	Station ID	Easting	Northing	UTM	Mg ppm	Mn ppm	Mo ppm	Na ppm	Ni ppm	P ppm	Pb ppm	Sb ppm*	Sc ppm	Sr ppm	Ti ppm	Tl ppm	U ppm	V ppm	W ppm*	Zn ppm
99MOB2056	MOB990186	377190	6901086	15	750	33	2.0	50	1.0	645	2.0	<2	<2	16.0	<50	<5	<5	0.5	<2	29.0
99MOB2057	MOB990186	377190	6901086	15	700	17	1.5	50	1.0	410	<0.5	<2	<2	13.5	<50	<5	<5	<0.5	<2	27.0
99MOB2058	MOB990186	377190	6901086	15	800	5	3.0	150	2.5	700	<0.5	<2	<2	51.0	<50	<5	5	2.5	<2	21.0
99MOB2059	MOB990186	377190	6901086	15	700	6	2.5	150	2.5	710	<0.5	<2	<2	40.0	50	<5	5	2.5	<2	27.0
99MOB2060	MOB990186	377190	6901086	15	750	8	1.5	50	6.5	565	<0.5	<2	<2	61.0	150	<5	5	3.0	<2	4.0
99MOB2061	MOB990187	377719	6905809	15	700	3	0.5	200	0.5	470	<0.5	<2	<2	11.5	<50	<5	<5	0.5	<2	10.0
99MOB2062	MOB990187	377719	6905809	15	350	3	0.5	300	0.5	605	<0.5	2	<2	14.5	<50	<5	<5	1.5	<2	5.0
99MOB2063	MOB990187	377719	6905809	15	50	3	<0.5	150	3.0	720	<0.5	<2	<2	10.0	50	<5	5	2.5	<2	1.5
99MOB2064	MOB990189	377381	6914460	15	750	7	4.5	150	1.5	785	<0.5	<2	<2	31.0	<50	<5	<5	1.5	<2	27.0
99MOB2065	MOB990189	377381	6914460	15	400	7	4.0	100	3.5	1270	<0.5	<2	<2	44.0	<50	<5	<5	5.0	<2	6.0
99MOB2066	MOB990190	382543	6910120	15	650	20	8.0	50	0.5	400	0.5	<2	<2	5.5	<50	<5	<5	<0.5	<2	24.0
99MOB2067	MOB990190	382543	6910120	15	800	19	5.0	50	1.5	480	0.5	<2	<2	11.0	<50	<5	<5	1.0	<2	19.0
99MOB2068	MOB990190	382543	6910120	15	750	12	7.5	100	4.5	1170	<0.5	<2	<2	24.0	50	<5	<5	4.5	<2	13.5
99MOB2069	MOB990190	382543	6910120	15	750	15	1.5	150	5.0	905	<0.5	2	<2	19.0	150	<5	<5	9.5	<2	4.5
99MOB2070	MOB990192	387667	6911517	15	400	9	1.5	200	2.0	590	<0.5	<2	<2	24.0	<50	<5	<5	1.0	<2	18.0
99MOB2071	MOB990192	387667	6911517	15	150	2	1.0	300	2.0	1315	<0.5	2	<2	22.0	<50	<5	<5	17.5	<2	11.0
99MOB2072	MOB990192	387667	6911517	15	150	3	<0.5	150	1.5	1260	<0.5	2	<2	14.5	100	<5	5	47.0	<2	1.5

*As, La, Sb and W analysed by INAA

** Hg analysed by CV-AAS, aqua regia digestion

Appendix XIII
Milestone AMA-254 Hg determinations

Note:

Sample preparation: Dwarf birch leave samples air-dried and crushed; bedrock samples pulverized to powder size (<75 μm); all other samples were air-dried

Laboratory: TSD's Sedimentology Laboratory in 1998-99 and MRD's Mercury Laboratory in 2000

Detection Limits: 1 ppb for 1997 and archived samples; 10 ppb for 1999 samples

Appendix XIIIa: Milestone AMA-254 Hg Content of Dwarf Birch Leaves

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)
97MOB0004	97MITE-1	388149	6913294	15	43
97MOB0013	97MITE-2	389326	6912075	15	48
97MOB0021	97MITE-3	390102	6911081	15	49
97MOB0022	97MITE-3	390102	6911081	15	8
97MOB0031	97MITE-4	390745	6910178	15	63
97MOB0032	97MITE-4	390745	6910178	15	7
97MOB0040	97MITE-5	391464	6909375	15	69
97MOB0041	97MITE-5	391464	6909375	15	8
97MOB0048	97MITE-6	392286	6908555	15	55
97MOB0049	97MITE-6	392286	6908555	15	21
97MOB0056	97MITE-7	392921	6907769	15	47
97MOB0057	97MITE-7	392921	6907769	15	9
97MOB0064	97MITE-8	393721	6906996	15	47
97MOB0065	97MITE-8	393721	6906996	15	22
97MOB0072	97MITE-9	394512	6906204	15	41
97MOB0073	97MITE-9	394512	6906204	15	15
97MOB0082	97MITE-10	395217	6905369	15	105
97MOB0083	97MITE-10	395217	6905369	15	71

Appendix XIIIb: Milestone AMA-254 Hg Content of Peat

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)
99MOB2056	MOB990186	377190	6901086	15	164
99MOB2057	MOB990186	377190	6901086	15	132
99MOB2058	MOB990186	377190	6901086	15	104
99MOB2059	MOB990186	377190	6901086	15	98
99MOB2060	MOB990186	377190	6901086	15	75
99MOB2061	MOB990187	377719	6905809	15	122
99MOB2062	MOB990187	377719	6905809	15	66
99MOB2063	MOB990187	377719	6905809	15	72
99MOB2064	MOB990189	377381	6914460	15	196
99MOB2065	MOB990189	377381	6914460	15	116
99MOB2066	MOB990190	382543	6910120	15	90
99MOB2067	MOB990190	382543	6910120	15	60
99MOB2068	MOB990190	382543	6910120	15	79
99MOB2069	MOB990190	382543	6910120	15	57
99MOB2070	MOB990192	387667	6911517	15	150
99MOB2071	MOB990192	387667	6911517	15	93
99MOB2072	MOB990192	387667	6911517	15	90

Appendix XIIIc: Milestone AMA-254 Hg Content of Humus, <2mm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)
97MOB0003	97MITE-1	388149	6913294	15	57
97MOB0012	97MITE-2	389326	6912075	15	156
97MOB0020	97MITE-3	390102	6911081	15	126
97MOB0030	97MITE-4	390745	6910178	15	65
97MOB0039	97MITE-5	391464	6909375	15	169
97MOB0047	97MITE-6	392286	6908555	15	123
97MOB0055	97MITE-7	392921	6907769	15	123
97MOB0063	97MITE-8	393721	6906996	15	285
97MOB0071	97MITE-9	394512	6906204	15	95
97MOB0081	97MITE-10	395217	6905369	15	227
99MOB2002	MOB990164	404026	6916661	15	345
99MOB2004	MOB990165	404454	6915898	15	226
99MOB2006	MOB990166	405045	6914929	15	164
99MOB2013	MOB990167	402005	6914817	15	192
99MOB2016	MOB990168	405610	6914374	15	166
99MOB2018	MOB990169	407108	6913055	15	226
99MOB2020	MOB990170	408214	6911942	15	228
99MOB2022	MOB990171	408931	6911230	15	201
99MOB2024	MOB990172	409839	6910689	15	230
99MOB2026	MOB990173	410937	6909473	15	228
99MOB2028	MOB990174	350895	6883517	15	157
99MOB2035	MOB990175	349732	6884943	15	443
99MOB2037	MOB990176	350750	6884039	15	59
99MOB2039	MOB990177	351670	6882871	15	226
99MOB2041	MOB990178	349262	6885450	15	102
99MOB2043	MOB990179	421097	6936957	15	231
99MOB2045	MOB990180	421422	6937243	15	159
99MOB2047	MOB990181	422725	6935968	15	175
99MOB2055	MOB990182	421700	6935690	15	192
99MOB2074	MOB990197	387813	6902215	15	96
99MOB2076	MOB990200	402332	6910418	15	210

Appendix XIIId: Milestone AMA-254 Hg Content of Till, <0.002 mm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)
97MOB0001	97MITE-1	388149	6913294	15	16
97MOB0002	97MITE-1	388149	6913294	15	19
97MOB0005	97MITE-2	389326	6912075	15	5
97MOB0006	97MITE-2	389326	6912075	15	5
97MOB0007	97MITE-2	389326	6912075	15	5
97MOB0008	97MITE-2	389326	6912075	15	5
97MOB0009	97MITE-2	389326	6912075	15	5
97MOB0010	97MITE-2	389326	6912075	15	5
97MOB0011	97MITE-2	389326	6912075	15	6
97MOB0014	97MITE-A	389500	6911539	15	10
97MOB0015	97MITE-3	390102	6911081	15	7
97MOB0016	97MITE-3	390102	6911081	15	9
97MOB0017	97MITE-3	390102	6911081	15	9
97MOB0018	97MITE-3	390102	6911081	15	12
97MOB0019	97MITE-3	390102	6911081	15	17
97MOB0023	97MITE-B	390237	6910960	15	10
97MOB0024	97MITE-C	390567	6910751	15	11
97MOB0026	97MITE-4	390745	6910178	15	4
97MOB0027	97MITE-4	390745	6910178	15	5
97MOB0028	97MITE-4	390745	6910178	15	6
97MOB0029	97MITE-4	390745	6910178	15	6
97MOB0033	97MITE-5	391464	6909375	15	3
97MOB0034	97MITE-5	391464	6909375	15	3
97MOB0035	97MITE-5	391464	6909375	15	3
97MOB0036	97MITE-5	391464	6909375	15	4
97MOB0037	97MITE-5	391464	6909375	15	4
97MOB0038	97MITE-5	391464	6909375	15	16
97MOB0042	97MITE-6	392286	6908555	15	4
97MOB0043	97MITE-6	392286	6908555	15	4
97MOB0044	97MITE-6	392286	6908555	15	4
97MOB0045	97MITE-6	392286	6908555	15	4
97MOB0046	97MITE-6	392286	6908555	15	10
97MOB0050	97MITE-7	392921	6907769	15	7
97MOB0051	97MITE-7	392921	6907769	15	6
97MOB0052	97MITE-7	392921	6907769	15	6
97MOB0053	97MITE-7	392921	6907769	15	8
97MOB0054	97MITE-7	392921	6907769	15	10
97MOB0058	97MITE-8	393721	6906996	15	6
97MOB0059	97MITE-8	393721	6906996	15	4
97MOB0060	97MITE-8	393721	6906996	15	5
97MOB0061	97MITE-8	393721	6906996	15	6
97MOB0062	97MITE-8	393721	6906996	15	7
97MOB0066	97MITE-9	394512	6906204	15	48
97MOB0067	97MITE-9	394512	6906204	15	42
97MOB0068	97MITE-9	394512	6906204	15	26
97MOB0069	97MITE-9	394512	6906204	15	29
97MOB0070	97MITE-9	394512	6906204	15	37
97MOB0074	97MITE-10	395217	6905369	15	6
97MOB0075	97MITE-10	395217	6905369	15	10
97MOB0076	97MITE-10	395217	6905369	15	5
97MOB0077	97MITE-10	395217	6905369	15	6

Appendix XIIId: Milestone AMA-254 Hg Content of Till, <0.002 mm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)
97MOB0078	97MITE-10	395217	6905369	15	4
97MOB0079	97MITE-10	395217	6905369	15	9
97MOB0080	97MITE-10	395217	6905369	15	16
97MOB0084	97MITE-E	379569	6909418	15	4
97MOB0085	97MITE-F	380429	6908638	15	14
97MOB0086	97MITE-G	380484	6908190	15	7
97MOB0087	97MITE-H	403250	6914400	15	4
97MOB0088	97MITE-I	374031	6900295	15	34
97MOB0089	97MITE-J	375392	6899236	15	30
97MOB0090	97MITE-K	376942	6897863	15	5
99MOB2001	MOB990164	404026	6916661	15	68
99MOB2003	MOB990165	404454	6915898	15	35
99MOB2005	MOB990166	405045	6914929	15	13
99MOB2007	MOB990167	402005	6914817	15	62
99MOB2008	MOB990167	402005	6914817	15	30
99MOB2009	MOB990167	402005	6914817	15	39
99MOB2010	MOB990167	402005	6914817	15	46
99MOB2011	MOB990167	402005	6914817	15	42
99MOB2012	MOB990167	402005	6914817	15	26
99MOB2014	MOB990167	402005	6914817	15	10
99MOB2015	MOB990168	405610	6914374	15	<10
99MOB2017	MOB990169	407108	6913055	15	160
99MOB2019	MOB990170	408214	6911942	15	12
99MOB2021	MOB990171	408931	6911230	15	10
99MOB2023	MOB990172	409839	6910689	15	13
99MOB2025	MOB990173	410937	6909473	15	<10
99MOB2027	MOB990174	350895	6883517	15	126
99MOB2029	MOB990175	349732	6884943	15	35
99MOB2030	MOB990175	349732	6884943	15	33
99MOB2031	MOB990175	349732	6884943	15	22
99MOB2032	MOB990175	349732	6884943	15	39
99MOB2033	MOB990175	349732	6884943	15	23
99MOB2034	MOB990175	349732	6884943	15	47
99MOB2036	MOB990176	350750	6884039	15	18
99MOB2038	MOB990177	351670	6882871	15	<10
99MOB2040	MOB990178	349262	6885450	15	<10
99MOB2042	MOB990179	421097	6936957	15	27
99MOB2044	MOB990180	421422	6937243	15	<10
99MOB2046	MOB990181	422725	6935968	15	41
99MOB2048	MOB990182	421700	6935690	15	17
99MOB2049	MOB990182	421700	6935690	15	15
99MOB2050	MOB990182	421700	6935690	15	16
99MOB2051	MOB990182	421700	6935690	15	14
99MOB2052	MOB990182	421700	6935690	15	23
99MOB2053	MOB990182	421700	6935690	15	47
99MOB2054	MOB990182	421700	6935690	15	69
99MOB2073	MOB990197	387813	6902215	15	135
99MOB2075	MOB990200	402332	6910418	15	22

Appendix XIIIe: Milestone AMA-254 Hg Content of Till, <0.063 mm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)
99MOB2001	MOB990164	404026	6916661	15	<10
99MOB2003	MOB990165	404454	6915898	15	<10
99MOB2005	MOB990166	405045	6914929	15	<10
99MOB2007	MOB990167	402005	6914817	15	16
99MOB2008	MOB990167	402005	6914817	15	<10
99MOB2009	MOB990167	402005	6914817	15	<10
99MOB2010	MOB990167	402005	6914817	15	<10
99MOB2011	MOB990167	402005	6914817	15	<10
99MOB2012	MOB990167	402005	6914817	15	<10
99MOB2014	MOB990167	402005	6914817	15	<10
99MOB2015	MOB990168	405610	6914374	15	<10
99MOB2017	MOB990169	407108	6913055	15	22
99MOB2019	MOB990170	408214	6911942	15	<10
99MOB2021	MOB990171	408931	6911230	15	<10
99MOB2023	MOB990172	409839	6910689	15	<10
99MOB2025	MOB990173	410937	6909473	15	<10
99MOB2027	MOB990174	350895	6883517	15	<10
99MOB2029	MOB990175	349732	6884943	15	11
99MOB2030	MOB990175	349732	6884943	15	<10
99MOB2031	MOB990175	349732	6884943	15	<10
99MOB2032	MOB990175	349732	6884943	15	<10
99MOB2033	MOB990175	349732	6884943	15	<10
99MOB2034	MOB990175	349732	6884943	15	<10
99MOB2036	MOB990176	350750	6884039	15	<10
99MOB2038	MOB990177	351670	6882871	15	<10
99MOB2040	MOB990178	349262	6885450	15	<10
99MOB2042	MOB990179	421097	6936957	15	<10
99MOB2044	MOB990180	421422	6937243	15	<10
99MOB2046	MOB990181	422725	6935968	15	<10
99MOB2048	MOB990182	421700	6935690	15	<10
99MOB2049	MOB990182	421700	6935690	15	<10
99MOB2050	MOB990182	421700	6935690	15	<10
99MOB2051	MOB990182	421700	6935690	15	<10
99MOB2052	MOB990182	421700	6935690	15	<10
99MOB2053	MOB990182	421700	6935690	15	<10
99MOB2054	MOB990182	421700	6935690	15	<10
99MOB2073	MOB990197	387813	6902215	15	<10
99MOB2075	MOB990200	402332	6910418	15	<10

Appendix XIIIf: Milestone AMA-254 Hg Content of Till, <2 mm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)
99MOB2001	MOB990164	404026	6916661	15	<10
99MOB2003	MOB990165	404454	6915898	15	<10
99MOB2005	MOB990166	405045	6914929	15	11
99MOB2007	MOB990167	402005	6914817	15	19
99MOB2008	MOB990167	402005	6914817	15	<10
99MOB2009	MOB990167	402005	6914817	15	<10
99MOB2010	MOB990167	402005	6914817	15	<10
99MOB2011	MOB990167	402005	6914817	15	<10
99MOB2012	MOB990167	402005	6914817	15	<10
99MOB2014	MOB990167	402005	6914817	15	<10
99MOB2015	MOB990168	405610	6914374	15	14
99MOB2017	MOB990169	407108	6913055	15	14
99MOB2019	MOB990170	408214	6911942	15	<10
99MOB2021	MOB990171	408931	6911230	15	<10
99MOB2023	MOB990172	409839	6910689	15	<10
99MOB2025	MOB990173	410937	6909473	15	<10
99MOB2027	MOB990174	350895	6883517	15	<10
99MOB2029	MOB990175	349732	6884943	15	<10
99MOB2030	MOB990175	349732	6884943	15	10
99MOB2031	MOB990175	349732	6884943	15	<10
99MOB2032	MOB990175	349732	6884943	15	<10
99MOB2033	MOB990175	349732	6884943	15	<10
99MOB2034	MOB990175	349732	6884943	15	<10
99MOB2036	MOB990176	350750	6884039	15	11
99MOB2038	MOB990177	351670	6882871	15	<10
99MOB2040	MOB990178	349262	6885450	15	<10
99MOB2042	MOB990179	421097	6936957	15	<10
99MOB2044	MOB990180	421422	6937243	15	18
99MOB2046	MOB990181	422725	6935968	15	<10
99MOB2048	MOB990182	421700	6935690	15	<10
99MOB2049	MOB990182	421700	6935690	15	<10
99MOB2050	MOB990182	421700	6935690	15	<10
99MOB2051	MOB990182	421700	6935690	15	<10
99MOB2052	MOB990182	421700	6935690	15	<10
99MOB2053	MOB990182	421700	6935690	15	<10
99MOB2054	MOB990182	421700	6935690	15	<10
99MOB2073	MOB990197	387813	6902215	15	12
99MOB2075	MOB990200	402332	6910418	15	<10

Appendix XIIIg: Milestone AMA-254 Hg Content of Bedrock

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)
ROCK97-13	97MOB-AB	405300	6915500	15	1
ROCK97-15	97MOB-AC	392834	6908959	15	3
ROCK97-17	MOB970377	374473	6899929	15	1

Appendix XIIIh: Milestone AMA-254 Hg Content of Archived Till Samples, <0.063 mm fraction

Sample	Easting	Northing	UTM	Hg (ppb)
70 0058	388800	6891000	15	53
70 0809	402000	6881100	15	7
70 0818	410100	6889100	15	18
70 0822	413800	6892600	15	4
70 0918	414200	6884000	15	2
70 1009	411200	6872200	15	3
70 1020	421100	6881900	15	10
70 1029	429100	6889500	15	35
70C 0011	343100	6883000	15	30
70C 0048	346200	6884150	15	26
70C 0056	354600	6880700	15	62
70C 0058	355900	6882200	15	5
70C 0059	347100	6882300	15	22
70C 0062	343400	6875600	15	108
70C 0064	345150	6877250	15	3
70C 0066	347200	6879050	15	5
70C 0067	347900	6879900	15	19
70C 0077	349400	6877700	15	19
70C 0078	350100	6878700	15	27
70C 0088	352200	6876800	15	11
70C 0089	352700	6877700	15	9
70C 0510	348800	6884350	15	25
70C 0810	353500	6879000	15	15
71A 0014	357500	6908100	15	5
71CL 0056	345200	6908300	15	23
71CL 0130	351000	6908200	15	48
71CL 0145	344000	6898300	15	21
71CL 0189	350600	6897700	15	98
71CL 0204	344400	6889900	15	51
71CL 0242	346100	6887400	15	11
71CL 0253	357800	6899100	15	42
71CL 0270	351300	6890500	15	5
71CL 0273	348200	6887300	15	41
71CL 0274	347300	6886300	15	45
71CL 0275	346000	6885300	15	7
71CL 0278	345300	6880000	15	10
71CL 0279	346900	6881200	15	35
71CL 0280	347700	6882300	15	7
71CL 0281	348500	6883200	15	28
71CL 0282	349700	6884300	15	9
71CL 0283	350900	6885600	15	99
71CL 0284	351900	6886700	15	13
71CL 0303	352900	6883800	15	14
71CL 0304	351600	6882800	15	59
71CL 0305	351200	6881400	15	15
71CL 0306	349900	6880600	15	6
71CL 0307	348800	6879600	15	28
71CL 0308	347500	6878600	15	40
71CL 0309	346600	6877600	15	9
71CL 0317	349400	6877500	15	53
71CL 0320	352600	6880500	15	34
71CL 0321	354100	6881800	15	71
71CL 0322	355100	6883100	15	14

Appendix XIIIh: Milestone AMA-254 Hg Content of Archived Till Samples, <0.063 mm fraction

Sample	Easting	Northing	UTM	Hg (ppb)
71CL 0323	356300	6884100	15	52
71CL 0324	363500	6891300	15	71
71CL 0342	357000	6881400	15	72
71CL 0344	355000	6879400	15	14
71CL 0345	353600	6878400	15	98
71CL 0346	352787	6877073	15	21
71CL 0348	350348	6875080	15	14
71CL 0360	355400	6876400	15	34
71CL 0361	356200	6877500	15	65
71CL 0362	357700	6878700	15	11
71CL 0366	363300	6883800	15	37
71CL 0372	370500	6890800	15	23
71CL 0375	375600	6891500	15	110
71CL 0401	362357	6875483	15	50
71CL 0408	370500	6883000	15	16
71KL 0040	382748	6898343	15	4
71KL 0080	388589	6897792	15	2
71KL 0103	382496	6890207	15	7
71KL 0125	395611	6897316	15	1
71KL 0156	395557	6890275	15	2
71KL 0181	388924	6882939	15	8
71KL 0196	394586	6884627	15	3
71KL 0205	400661	6890081	15	15
73 3000	352200	6915800	15	17
73 3006	357800	6915200	15	3
73 3014	364600	6915100	15	3
73 3022	370300	6915100	15	1
73 3166	370900	6908600	15	4
73 3376	363200	6899200	15	4
73 3384	369800	6899000	15	4
73 3400	377100	6897600	15	3
73QL 0020	409100	6919200	15	34
73QL 0026	403100	6922100	15	5
73QL 0062	423000	6921700	15	13
73QL 0072	429100	6921500	15	20
73QL 0094	416800	6920100	15	60
73QL 0174	402000	6914800	15	106
73QL 0188	395500	6914900	15	4
73QL 0204	408800	6914700	15	7
73QL 0212	414900	6915300	15	25
73QL 0222	422500	6915500	15	12
73QL 0230	428900	6915500	15	4
73QL 0444	430700	6906700	15	4
73QL 0454	422500	6906800	15	2
73QL 0464	415000	6906900	15	5
73QL 0472	408800	6906200	15	5
73QL 0480	403300	6906100	15	9
73QL 0488	395500	6906800	15	25
73QL 0672	414500	6899100	15	5
73QL 0692	430900	6898500	15	11
73QL 0710	422600	6897700	15	6

Appendix XIV
LOI, Organic C and pH

Note:

1. LOI
Sample preparation: oven dried sample
Analytical Method: 0.5 to 0.6 g heated at 550°C for one hour; resulting weight loss expressed as percentage of the dry weight

2. Organic C
Sample preparation: air dried sample
Analytical Method: 350 mg analysed with Leco CR-412 Carbon Determinator

3. pH
Sample preparation: air dried sample; 10 g soaked with $CaCl_2$
Analytical Method: Omega PHH-7X pH pen

Appendix XIVa: LOI, Organic Carbon, pH and Bulk Density of Peat

Sample	Station ID	Easting	Northing	UTM	LOI (%)	Organic C (%)	pH	Bulk density (g/cm^3)
99MOB2056	MOB990186	377190	6901086	15	95.5	44.1	3.3	-
99MOB2057	MOB990186	377190	6901086	15	97.5	44.0	3.2	-
99MOB2058	MOB990186	377190	6901086	15	86.0	38.8	3.6	-
99MOB2059	MOB990186	377190	6901086	15	74.3	38.4	3.3	0.09
99MOB2060	MOB990186	377190	6901086	15	56.9	31.7	4.5	0.29
99MOB2061	MOB990187	377719	6905809	15	96.3	47.0	2.6	-
99MOB2062	MOB990187	377719	6905809	15	91.6	44.4	2.6	-
99MOB2063	MOB990187	377719	6905809	15	82.7	41.2	2.9	-
99MOB2064	MOB990189	377381	6914460	15	94.6	45.0	2.9	-
99MOB2065	MOB990189	377381	6914460	15	90.5	42.5	3.4	-
99MOB2066	MOB990190	382543	6910120	15	97.8	46.2	3.1	-
99MOB2067	MOB990190	382543	6910120	15	97.9	46.4	3.2	0.13
99MOB2068	MOB990190	382543	6910120	15	86.1	42.0	3.4	-
99MOB2069	MOB990190	382543	6910120	15	59.4	27.9	3.5	-
99MOB2070	MOB990192	387667	6911517	15	94.0	46.0	2.8	-
99MOB2071	MOB990192	387667	6911517	15	89.5	44.2	3.3	-
99MOB2072	MOB990192	387667	6911517	15	77.3	38.4	3.5	-

Appendix XIVb: LOI, Organic Carbon and pH of Humus, <2 mm fraction

Sample	Station ID	Easting	Northing	UTM	LOI (%)	Organic C (%)	pH
97MOB0003	97MITE-1	388149	6913294	15	14.2	-	-
97MOB0012	97MITE-2	389326	6912075	15	42.0	21.0	4.4
97MOB0020	97MITE-3	390102	6911081	15	30.0	-	-
97MOB0030	97MITE-4	390745	6910178	15	19.6	-	-
97MOB0039	97MITE-5	391464	6909375	15	32.0	-	-
97MOB0047	97MITE-6	392286	6908555	15	38.6	-	-
97MOB0055	97MITE-7	392921	6907769	15	34.8	-	-
97MOB0063	97MITE-8	393721	6906996	15	82.0	-	-
97MOB0071	97MITE-9	394512	6906204	15	91.6	-	-
97MOB0081	97MITE-10	395217	6905369	15	82.4	35.4	3.6
99MOB2002	MOB990164	404026	6916661	15	83.2	40.3	-
99MOB2004	MOB990165	404454	6915898	15	79.9	36.9	-
99MOB2006	MOB990166	405045	6914929	15	83.5	37.4	-
99MOB2013	MOB990167	402005	6914817	15	88.7	41.0	3.9
99MOB2016	MOB990168	405610	6914374	15	47.4	21.8	-
99MOB2018	MOB990169	407108	6913055	15	82.6	39.1	-
99MOB2020	MOB990170	408214	6911942	15	88.6	41.2	-
99MOB2022	MOB990171	408931	6911230	15	77.4	36.7	-
99MOB2024	MOB990172	409839	6910689	15	96.1	46.3	-
99MOB2026	MOB990173	410937	6909473	15	76.1	36.5	-
99MOB2028	MOB990174	350895	6883517	15	93.9	43.9	-
99MOB2035	MOB990175	349732	6884943	15	91.6	43.3	3.0
99MOB2037	MOB990176	350750	6884039	15	22.5	10.2	-
99MOB2039	MOB990177	351670	6882871	15	73.6	34.9	-
99MOB2041	MOB990178	349262	6885450	15	50.5	24.0	-
99MOB2043	MOB990179	421097	6936957	15	85.0	39.6	-
99MOB2045	MOB990180	421422	6937243	15	79.8	36.8	-
99MOB2047	MOB990181	422725	6935968	15	89.9	43.1	-
99MOB2055	MOB990182	421700	6935690	15	89.6	43.0	4.1
99MOB2074	MOB990197	387813	6902215	15	70.3	34.6	-
99MOB2076	MOB990200	402332	6910418	15	94.3	44.9	-

Appendix XIVc: LOI, Organic Carbon and pH of Till, <0.002 mm fraction

Sample	Station ID	Easting	Northing	UTM	LOI (%)	Organic C (%)	pH
97MOB0001	97MITE-1	388149	6913294	15	2.8	-	-
97MOB0002	97MITE-1	388149	6913294	15	4.2	-	-
97MOB0005	97MITE-2	389326	6912075	15	4.6	0.3	-
97MOB0006	97MITE-2	389326	6912075	15	3.6	0.5	6.3
97MOB0007	97MITE-2	389326	6912075	15	3.4	0.6	6.3
97MOB0008	97MITE-2	389326	6912075	15	3.2	0.3	6.4
97MOB0009	97MITE-2	389326	6912075	15	3.0	0.5	6.3
97MOB0010	97MITE-2	389326	6912075	15	3.0	0.5	-
97MOB0011	97MITE-2	389326	6912075	15	3.2	0.3	-
97MOB0014	97MITE-A	389500	6911539	15	6.6	-	-
97MOB0015	97MITE-3	390102	6911081	15	4.2	-	-
97MOB0016	97MITE-3	390102	6911081	15	4.4	-	-
97MOB0017	97MITE-3	390102	6911081	15	3.4	-	-
97MOB0018	97MITE-3	390102	6911081	15	3.4	-	-
97MOB0019	97MITE-3	390102	6911081	15	4.0	-	-
97MOB0023	97MITE-B	390237	6910960	15	2.8	-	-
97MOB0024	97MITE-C	390567	6910751	15	2.4	-	-
97MOB0025	97MITE-4	390745	6910178	15	2.2	-	-
97MOB0026	97MITE-4	390745	6910178	15	2.6	-	-
97MOB0027	97MITE-4	390745	6910178	15	2.6	-	-
97MOB0028	97MITE-4	390745	6910178	15	2.8	-	-
97MOB0029	97MITE-4	390745	6910178	15	2.8	-	-
97MOB0033	97MITE-5	391464	6909375	15	1.8	-	-
97MOB0034	97MITE-5	391464	6909375	15	2.6	-	-
97MOB0035	97MITE-5	391464	6909375	15	2.2	-	-
97MOB0036	97MITE-5	391464	6909375	15	3.0	-	-
97MOB0037	97MITE-5	391464	6909375	15	3.0	-	-
97MOB0038	97MITE-5	391464	6909375	15	5.2	-	-
97MOB0042	97MITE-6	392286	6908555	15	2.4	-	-
97MOB0043	97MITE-6	392286	6908555	15	2.6	-	-
97MOB0044	97MITE-6	392286	6908555	15	2.8	-	-
97MOB0045	97MITE-6	392286	6908555	15	2.2	-	-
97MOB0046	97MITE-6	392286	6908555	15	3.0	-	-
97MOB0050	97MITE-7	392921	6907769	15	2.6	-	-
97MOB0051	97MITE-7	392921	6907769	15	2.4	-	-
97MOB0052	97MITE-7	392921	6907769	15	2.2	-	-
97MOB0053	97MITE-7	392921	6907769	15	3.2	-	-
97MOB0054	97MITE-7	392921	6907769	15	3.0	-	-
97MOB0058	97MITE-8	393721	6906996	15	2.2	-	-
97MOB0059	97MITE-8	393721	6906996	15	1.4	-	-
97MOB0060	97MITE-8	393721	6906996	15	1.2	-	-
97MOB0061	97MITE-8	393721	6906996	15	1.8	-	-
97MOB0062	97MITE-8	393721	6906996	15	1.8	-	-
97MOB0066	97MITE-9	394512	6906204	15	20.6	-	-
97MOB0067	97MITE-9	394512	6906204	15	15.6	-	-
97MOB0068	97MITE-9	394512	6906204	15	8.8	-	-
97MOB0069	97MITE-9	394512	6906204	15	8.2	-	-
97MOB0070	97MITE-9	394512	6906204	15	9.4	-	-
97MOB0074	97MITE-10	395217	6905369	15	2.8	not/ss	6.1
97MOB0075	97MITE-10	395217	6905369	15	3.6	0.7	6.0

Appendix XIVc: LOI, Organic Carbon and pH of Till, <0.002 mm fraction

Sample	Station ID	Easting	Northing	UTM	LOI (%)	Organic C (%)	pH
97MOB0076	97MITE-10	395217	6905369	15	3.4	0.3	6.0
97MOB0077	97MITE-10	395217	6905369	15	2.8	0.3	6.0
97MOB0078	97MITE-10	395217	6905369	15	1.4	0.4	6.0
97MOB0079	97MITE-10	395217	6905369	15	2.0	0.3	5.7
97MOB0080	97MITE-10	395217	6905369	15	5.0	1.2	5.5
97MOB0084	97MITE-E	379569	6909418	15	2.2	-	-
97MOB0085	97MITE-F	380429	6908638	15	7.4	-	-
97MOB0086	97MITE-G	380484	6908190	15	2.2	-	-
97MOB0087	97MITE-H	403250	6914400	15	2.2	-	-
97MOB0088	97MITE-I	374031	6900295	15	1.2	-	-
97MOB0089	97MITE-J	375392	6899236	15	6.2	-	-
97MOB0090	97MITE-K	376942	6897863	15	2.6	-	-
99MOB2001	MOB990164	404026	6916661	15	22.4	9.7	-
99MOB2003	MOB990165	404454	6915898	15	7.4	2.1	-
99MOB2005	MOB990166	405045	6914929	15	3.2	0.3	-
99MOB2007	MOB990167	402005	6914817	15	25.2	-	-
99MOB2008	MOB990167	402005	6914817	15	13.4	-	-
99MOB2009	MOB990167	402005	6914817	15	13.8	-	-
99MOB2010	MOB990167	402005	6914817	15	17.8	-	-
99MOB2011	MOB990167	402005	6914817	15	16.0	-	-
99MOB2012	MOB990167	402005	6914817	15	9.6	-	-
99MOB2014	MOB990167	402005	6914817	15	4.0	0.4	-
99MOB2015	MOB990168	405610	6914374	15	3.2	0.1	-
99MOB2017	MOB990169	407108	6913055	15	17.4	3.4	-
99MOB2019	MOB990170	408214	6911942	15	3.0	0.7	-
99MOB2021	MOB990171	408931	6911230	15	3.2	0.3	-
99MOB2023	MOB990172	409839	6910689	15	3.4	0.4	-
99MOB2025	MOB990173	410937	6909473	15	3.2	0.2	-
99MOB2027	MOB990174	350895	6883517	15	12.2	0.2	-
99MOB2029	MOB990175	349732	6884943	15	10.6	3.7	-
99MOB2030	MOB990175	349732	6884943	15	9.4	-	-
99MOB2031	MOB990175	349732	6884943	15	6.8	-	-
99MOB2032	MOB990175	349732	6884943	15	12.2	-	-
99MOB2033	MOB990175	349732	6884943	15	9.0	-	-
99MOB2034	MOB990175	349732	6884943	15	10.8	3.2	-
99MOB2036	MOB990176	350750	6884039	15	8.6	2.0	-
99MOB2038	MOB990177	351670	6882871	15	3.6	0.2	-
99MOB2040	MOB990178	349262	6885450	15	2.8	0.2	-
99MOB2042	MOB990179	421097	6936957	15	14.2	4.9	-
99MOB2044	MOB990180	421422	6937243	15	6.4	0.5	-
99MOB2046	MOB990181	422725	6935968	15	14.0	4.1	-
99MOB2048	MOB990182	421700	6935690	15	7.0	-	-
99MOB2049	MOB990182	421700	6935690	15	7.2	-	-
99MOB2050	MOB990182	421700	6935690	15	not/ss	-	-
99MOB2051	MOB990182	421700	6935690	15	8.4	-	-
99MOB2052	MOB990182	421700	6935690	15	10.0	-	-
99MOB2053	MOB990182	421700	6935690	15	14.4	-	-
99MOB2054	MOB990182	421700	6935690	15	20.2	-	-
99MOB2073	MOB990197	387813	6902215	15	16.8	1.7	-
99MOB2075	MOB990200	402332	6910418	15	3.4	0.3	-

Appendix XIVd: LOI, Organic Carbon and pH of Till, <0.063 mm fraction

Sample	Station ID	Easting	Northing	UTM	LOI (%)	Organic C (%)	pH
97MOB0001	97MITE-1	388149	6913294	15	0.0	-	-
97MOB0002	97MITE-1	388149	6913294	15	0.4	-	-
97MOB0005	97MITE-2	389326	6912075	15	1.6	ND*	6.3
97MOB0006	97MITE-2	389326	6912075	15	2.2	ND*	6.2
97MOB0007	97MITE-2	389326	6912075	15	2.4	not/ss	not/ss
97MOB0008	97MITE-2	389326	6912075	15	2.2	ND*	6.2
97MOB0009	97MITE-2	389326	6912075	15	1.8	ND*	6.2
97MOB0010	97MITE-2	389326	6912075	15	1.6	ND*	6.2
97MOB0011	97MITE-2	389326	6912075	15	0.6	ND*	6.2
97MOB0014	97MITE-A	389500	6911539	15	0.4	-	-
97MOB0015	97MITE-3	390102	6911081	15	0.1	-	-
97MOB0016	97MITE-3	390102	6911081	15	0.4	-	-
97MOB0017	97MITE-3	390102	6911081	15	0.2	-	-
97MOB0018	97MITE-3	390102	6911081	15	0.6	-	-
97MOB0019	97MITE-3	390102	6911081	15	0.2	-	-
97MOB0023	97MITE-B	390237	6910960	15	0.0	-	-
97MOB0024	97MITE-C	390567	6910751	15	0.6	-	-
97MOB0025	97MITE-4	390745	6910178	15	0.2	-	-
97MOB0026	97MITE-4	390745	6910178	15	0.6	-	-
97MOB0027	97MITE-4	390745	6910178	15	0.2	-	-
97MOB0028	97MITE-4	390745	6910178	15	0.2	-	-
97MOB0029	97MITE-4	390745	6910178	15	0.0	-	-
97MOB0033	97MITE-5	391464	6909375	15	0.4	-	-
97MOB0034	97MITE-5	391464	6909375	15	0.8	-	-
97MOB0035	97MITE-5	391464	6909375	15	0.4	-	-
97MOB0036	97MITE-5	391464	6909375	15	1.2	-	-
97MOB0037	97MITE-5	391464	6909375	15	1.0	-	-
97MOB0038	97MITE-5	391464	6909375	15	1.2	-	-
97MOB0042	97MITE-6	392286	6908555	15	0.8	-	-
97MOB0043	97MITE-6	392286	6908555	15	1.4	-	-
97MOB0044	97MITE-6	392286	6908555	15	1.2	-	-
97MOB0045	97MITE-6	392286	6908555	15	0.6	-	-
97MOB0046	97MITE-6	392286	6908555	15	0.2	-	-
97MOB0050	97MITE-7	392921	6907769	15	1.0	-	-
97MOB0051	97MITE-7	392921	6907769	15	1.2	-	-
97MOB0052	97MITE-7	392921	6907769	15	0.6	-	-
97MOB0053	97MITE-7	392921	6907769	15	0.4	-	-
97MOB0054	97MITE-7	392921	6907769	15	0.4	-	-
97MOB0058	97MITE-8	393721	6906996	15	0.2	-	-
97MOB0059	97MITE-8	393721	6906996	15	0.0	-	-
97MOB0060	97MITE-8	393721	6906996	15	0.8	-	-
97MOB0061	97MITE-8	393721	6906996	15	0.0	-	-
97MOB0062	97MITE-8	393721	6906996	15	0.4	-	-
97MOB0066	97MITE-9	394512	6906204	15	1.6	-	-
97MOB0067	97MITE-9	394512	6906204	15	1.2	-	-
97MOB0068	97MITE-9	394512	6906204	15	0.4	-	-
97MOB0069	97MITE-9	394512	6906204	15	0.8	-	-
97MOB0070	97MITE-9	394512	6906204	15	0.6	-	-
97MOB0074	97MITE-10	395217	6905369	15	1.2	ND*	5.9
97MOB0075	97MITE-10	395217	6905369	15	1.0	ND*	5.8
97MOB0076	97MITE-10	395217	6905369	15	0.8	ND*	6.0
97MOB0077	97MITE-10	395217	6905369	15	0.6	ND*	6.0
97MOB0078	97MITE-10	395217	6905369	15	0.8	ND*	6.1
97MOB0079	97MITE-10	395217	6905369	15	0.6	ND*	5.8
97MOB0080	97MITE-10	395217	6905369	15	1.2	ND*	5.5
97MOB0084	97MITE-E	379569	6909418	15	1.6	-	-
97MOB0085	97MITE-F	380429	6908638	15	1.6	-	-
97MOB0086	97MITE-G	380484	6908190	15	0.8	-	-
97MOB0087	97MITE-H	403250	6914400	15	1.2	-	-
97MOB0088	97MITE-I	374031	6900295	15	2.6	-	-

* Organic C not determined because Total C < 0.1%

Appendix XIVd: LOI, Organic Carbon and pH of Till, <0.063 mm fraction

Sample	Station ID	Easting	Northing	UTM	LOI (%)	Organic C (%)	pH
97MOB0089	97MITE-J	375392	6899236	15	1.0	-	-
97MOB0090	97MITE-K	376942	6897863	15	2.0	-	-
99MOB2001	MOB990164	404026	6916661	15	-	0.3	-
99MOB2003	MOB990165	404454	6915898	15	-	0.0	-
99MOB2005	MOB990166	405045	6914929	15	-	0.0	-
99MOB2007	MOB990167	402005	6914817	15	-	3.6	5.7
99MOB2008	MOB990167	402005	6914817	15	-	0.5	4.9
99MOB2009	MOB990167	402005	6914817	15	-	0.7	5.0
99MOB2010	MOB990167	402005	6914817	15	-	0.8	4.9
99MOB2011	MOB990167	402005	6914817	15	-	0.8	5.0
99MOB2012	MOB990167	402005	6914817	15	-	0.3	4.8
99MOB2014	MOB990167	402005	6914817	15	-	0.0	-
99MOB2015	MOB990168	405610	6914374	15	-	0.0	-
99MOB2017	MOB990169	407108	6913055	15	-	0.8	-
99MOB2019	MOB990170	408214	6911942	15	-	0.0	-
99MOB2021	MOB990171	408931	6911230	15	-	0.0	-
99MOB2023	MOB990172	409839	6910689	15	-	0.1	-
99MOB2025	MOB990173	410937	6909473	15	-	0.0	-
99MOB2027	MOB990174	350895	6883517	15	-	0.3	-
99MOB2029	MOB990175	349732	6884943	15	-	0.1	4.7
99MOB2030	MOB990175	349732	6884943	15	-	0.1	4.6
99MOB2031	MOB990175	349732	6884943	15	-	0.0	4.7
99MOB2032	MOB990175	349732	6884943	15	-	0.1	4.8
99MOB2033	MOB990175	349732	6884943	15	-	0.0	4.9
99MOB2034	MOB990175	349732	6884943	15	-	0.0	5.0
99MOB2036	MOB990176	350750	6884039	15	-	0.3	-
99MOB2038	MOB990177	351670	6882871	15	-	0.0	-
99MOB2040	MOB990178	349262	6885450	15	-	0.0	-
99MOB2042	MOB990179	421097	6936957	15	-	0.1	-
99MOB2044	MOB990180	421422	6937243	15	-	0.2	-
99MOB2046	MOB990181	422725	6935968	15	-	0.4	-
99MOB2048	MOB990182	421700	6935690	15	-	0.0	4.9
99MOB2049	MOB990182	421700	6935690	15	-	0.0	4.7
99MOB2050	MOB990182	421700	6935690	15	-	0.0	4.7
99MOB2051	MOB990182	421700	6935690	15	-	0.0	4.7
99MOB2052	MOB990182	421700	6935690	15	-	0.1	4.7
99MOB2053	MOB990182	421700	6935690	15	-	0.2	4.6
99MOB2054	MOB990182	421700	6935690	15	-	0.3	5.0
99MOB2073	MOB990197	387813	6902215	15	-	0.1	-
99MOB2075	MOB990200	402332	6910418	15	-	0.0	-

* Organic C not determined because Total C < 0.1%

Appendix XIVe: LOI, Organic Carbon and pH of Till, <2 mm fraction

Sample	Station ID	Easting	Northing	UTM	LOI (%)	Organic C (%)	pH
97MOB0001	97MITE-1	388149	6913294	15	0.8	-	-
97MOB0002	97MITE-1	388149	6913294	15	0.2	-	-
97MOB0005	97MITE-2	389326	6912075	15	0.2	-	-
97MOB0006	97MITE-2	389326	6912075	15	0.2	-	-
97MOB0007	97MITE-2	389326	6912075	15	0.4	-	-
97MOB0008	97MITE-2	389326	6912075	15	0.6	-	-
97MOB0009	97MITE-2	389326	6912075	15	0.2	-	-
97MOB0010	97MITE-2	389326	6912075	15	0.0	-	-
97MOB0011	97MITE-2	389326	6912075	15	0.4	-	-
97MOB0014	97MITE-A	389500	6911539	15	1.0	-	-
97MOB0015	97MITE-3	390102	6911081	15	0.6	-	-
97MOB0016	97MITE-3	390102	6911081	15	0.6	-	-
97MOB0017	97MITE-3	390102	6911081	15	0.8	-	-
97MOB0018	97MITE-3	390102	6911081	15	0.8	-	-
97MOB0019	97MITE-3	390102	6911081	15	0.8	-	-
97MOB0023	97MITE-B	390237	6910960	15	1.0	-	-
97MOB0024	97MITE-C	390567	6910751	15	1.0	-	-
97MOB0025	97MITE-4	390745	6910178	15	1.4	-	-
97MOB0026	97MITE-4	390745	6910178	15	0.6	-	-
97MOB0027	97MITE-4	390745	6910178	15	0.6	-	-
97MOB0028	97MITE-4	390745	6910178	15	1.8	-	-
97MOB0029	97MITE-4	390745	6910178	15	1.6	-	-
97MOB0033	97MITE-5	391464	6909375	15	1.6	-	-
97MOB0034	97MITE-5	391464	6909375	15	2.2	-	-
97MOB0035	97MITE-5	391464	6909375	15	2.0	-	-
97MOB0036	97MITE-5	391464	6909375	15	2.4	-	-
97MOB0037	97MITE-5	391464	6909375	15	1.0	-	-
97MOB0038	97MITE-5	391464	6909375	15	1.0	-	-
97MOB0042	97MITE-6	392286	6908555	15	0.6	-	-
97MOB0043	97MITE-6	392286	6908555	15	1.0	-	-
97MOB0044	97MITE-6	392286	6908555	15	0.8	-	-
97MOB0045	97MITE-6	392286	6908555	15	1.2	-	-
97MOB0046	97MITE-6	392286	6908555	15	0.8	-	-
97MOB0050	97MITE-7	392921	6907769	15	1.0	-	-
97MOB0051	97MITE-7	392921	6907769	15	1.2	-	-
97MOB0052	97MITE-7	392921	6907769	15	0.8	-	-
97MOB0053	97MITE-7	392921	6907769	15	0.4	-	-
97MOB0054	97MITE-7	392921	6907769	15	0.2	-	-
97MOB0058	97MITE-8	393721	6906996	15	0.4	-	-
97MOB0059	97MITE-8	393721	6906996	15	0.0	-	-
97MOB0060	97MITE-8	393721	6906996	15	0.2	-	-
97MOB0061	97MITE-8	393721	6906996	15	0.2	-	-
97MOB0062	97MITE-8	393721	6906996	15	0.2	-	-
97MOB0066	97MITE-9	394512	6906204	15	1.2	-	-
97MOB0067	97MITE-9	394512	6906204	15	1.0	-	-
97MOB0068	97MITE-9	394512	6906204	15	0.4	-	-
97MOB0069	97MITE-9	394512	6906204	15	0.0	-	-
97MOB0070	97MITE-9	394512	6906204	15	0.4	-	-
97MOB0074	97MITE-10	395217	6905369	15	0.6	-	-
97MOB0075	97MITE-10	395217	6905369	15	0.4	-	-
97MOB0076	97MITE-10	395217	6905369	15	0.6	-	-
97MOB0077	97MITE-10	395217	6905369	15	0.0	-	-
97MOB0078	97MITE-10	395217	6905369	15	0.2	-	-
97MOB0079	97MITE-10	395217	6905369	15	0.0	-	-
97MOB0080	97MITE-10	395217	6905369	15	0.2	-	-
97MOB0084	97MITE-E	379569	6909418	15	0.8	-	-

Appendix XIVe: LOI, Organic Carbon and pH of Till, <2 mm fraction

Sample	Station ID	Easting	Northing	UTM	LOI (%)	Organic C (%)	pH
97MOB0085	97MITE-F	380429	6908638	15	0.8	-	-
97MOB0086	97MITE-G	380484	6908190	15	0.2	-	-
97MOB0087	97MITE-H	403250	6914400	15	0.2	-	-
97MOB0088	97MITE-I	374031	6900295	15	0.6	-	-
97MOB0089	97MITE-J	375392	6899236	15	0.2	-	-
97MOB0090	97MITE-K	376942	6897863	15	0.6	-	-
99MOB2001	MOB990164	404026	6916661	15	-	0.2	-
99MOB2003	MOB990165	404454	6915898	15	-	0.0	-
99MOB2005	MOB990166	405045	6914929	15	-	ND*	-
99MOB2007	MOB990167	402005	6914817	15	-	2.0	5.8
99MOB2008	MOB990167	402005	6914817	15	-	0.5	4.9
99MOB2009	MOB990167	402005	6914817	15	-	1.1	5.0
99MOB2010	MOB990167	402005	6914817	15	-	0.5	5.0
99MOB2011	MOB990167	402005	6914817	15	-	0.6	5.0
99MOB2012	MOB990167	402005	6914817	15	-	0.3	4.8
99MOB2014	MOB990167	402005	6914817	15	-	ND*	-
99MOB2015	MOB990168	405610	6914374	15	-	ND*	-
99MOB2017	MOB990169	407108	6913055	15	-	0.5	-
99MOB2019	MOB990170	408214	6911942	15	-	ND*	-
99MOB2021	MOB990171	408931	6911230	15	-	ND*	-
99MOB2023	MOB990172	409839	6910689	15	-	0.1	-
99MOB2025	MOB990173	410937	6909473	15	-	ND*	-
99MOB2027	MOB990174	350895	6883517	15	-	0.2	-
99MOB2029	MOB990175	349732	6884943	15	-	ND*	4.7
99MOB2030	MOB990175	349732	6884943	15	-	ND*	4.6
99MOB2031	MOB990175	349732	6884943	15	-	ND*	4.8
99MOB2032	MOB990175	349732	6884943	15	-	0.1	4.9
99MOB2033	MOB990175	349732	6884943	15	-	ND*	4.9
99MOB2034	MOB990175	349732	6884943	15	-	0.1	4.9
99MOB2036	MOB990176	350750	6884039	15	-	0.2	-
99MOB2038	MOB990177	351670	6882871	15	-	ND*	-
99MOB2040	MOB990178	349262	6885450	15	-	ND*	-
99MOB2042	MOB990179	421097	6936957	15	-	0.1	-
99MOB2044	MOB990180	421422	6937243	15	-	0.2	-
99MOB2046	MOB990181	422725	6935968	15	-	0.3	-
99MOB2048	MOB990182	421700	6935690	15	-	ND*	5.0
99MOB2049	MOB990182	421700	6935690	15	-	ND*	4.8
99MOB2050	MOB990182	421700	6935690	15	-	ND*	4.7
99MOB2051	MOB990182	421700	6935690	15	-	ND*	4.7
99MOB2052	MOB990182	421700	6935690	15	-	ND*	4.6
99MOB2053	MOB990182	421700	6935690	15	-	0.1	4.7
99MOB2054	MOB990182	421700	6935690	15	-	0.2	5.0
99MOB2073	MOB990197	387813	6902215	15	-	0.0	-
99MOB2075	MOB990200	402332	6910418	15	-	ND*	-

* Organic C not determined because Total C < 0.1%

Appendix XV
Part A: Sand Silt Clay Distribution

Note:

Sample preparation: 300-500g of dry bulk material

Analytical Method: Driy sieved: >2 mm (10 mesh) and sand fraction (0.063-2 mm; >230 and <10 mesh)
Particle Size Analyzer: silt (0.002-0.063 mm) and clay (<0.002 mm) fractions

Appendix XVa: Sand Silt Clay Distribution

Sample	Station ID	Easting	Northing	UTM	% > 2mm	<2 mm		
						% Sand	% Silt	% Clay
97MOB0001	97MITE-1	388149	6913294	15	8.04	57.51	41.87	0.62
97MOB0002	97MITE-1	388149	6913294	15	8.09	57.33	42.08	0.59
97MOB0005	97MITE-2	389326	6912075	15	12.20	50.43	48.24	1.33
97MOB0006	97MITE-2	389326	6912075	15	16.58	48.31	50.97	0.72
97MOB0007	97MITE-2	389326	6912075	15	12.16	45.55	50.66	3.79
97MOB0008	97MITE-2	389326	6912075	15	20.39	44.35	52.16	3.49
97MOB0009	97MITE-2	389326	6912075	15	10.96	47.03	50.37	2.60
97MOB0010	97MITE-2	389326	6912075	15	9.79	47.53	50.75	1.73
97MOB0011	97MITE-2	389326	6912075	15	10.74	44.11	54.67	1.21
97MOB0014	97MITE-A	389500	6911539	15	26.81	65.48	33.52	1.00
97MOB0015	97MITE-3	390102	6911081	15	22.51	73.50	26.04	0.45
97MOB0016	97MITE-3	390102	6911081	15	25.58	69.10	30.19	0.70
97MOB0017	97MITE-3	390102	6911081	15	9.05	55.97	42.85	1.18
97MOB0018	97MITE-3	390102	6911081	15	10.13	54.98	44.03	0.99
97MOB0019	97MITE-3	390102	6911081	15	13.81	58.73	40.69	0.57
97MOB0023	97MITE-B	390237	6910960	15	20.07	65.45	34.26	0.29
97MOB0024	97MITE-C	390567	6910751	15	7.94	60.35	38.89	0.76
97MOB0025	97MITE-4	390745	6910178	15	23.00	46.06	51.61	2.33
97MOB0026	97MITE-4	390745	6910178	15	9.42	43.75	55.68	0.57
97MOB0027	97MITE-4	390745	6910178	15	9.00	48.15	50.48	1.38
97MOB0028	97MITE-4	390745	6910178	15	8.28	52.72	45.90	1.39
97MOB0029	97MITE-4	390745	6910178	15	6.12	51.88	46.42	1.70
97MOB0033	97MITE-5	391464	6909375	15	8.83	48.70	49.22	2.08
97MOB0034	97MITE-5	391464	6909375	15	9.43	48.77	49.15	2.08
97MOB0035	97MITE-5	391464	6909375	15	8.30	50.85	48.38	0.77
97MOB0036	97MITE-5	391464	6909375	15	6.75	53.24	44.34	2.42
97MOB0037	97MITE-5	391464	6909375	15	9.15	42.77	53.66	3.57
97MOB0038	97MITE-5	391464	6909375	15	6.30	41.53	55.47	3.00
97MOB0042	97MITE-6	392286	6908555	15	8.61	48.27	49.24	2.49
97MOB0043	97MITE-6	392286	6908555	15	7.09	47.18	49.38	3.43
97MOB0044	97MITE-6	392286	6908555	15	9.27	48.80	50.33	0.87
97MOB0045	97MITE-6	392286	6908555	15	10.12	52.16	46.57	1.27
97MOB0046	97MITE-6	392286	6908555	15	7.22	50.20	49.23	0.57
97MOB0050	97MITE-7	392921	6907769	15	16.97	47.23	49.81	2.97
97MOB0051	97MITE-7	392921	6907769	15	15.51	48.10	48.35	3.54
97MOB0052	97MITE-7	392921	6907769	15	13.24	43.58	53.16	3.26
97MOB0053	97MITE-7	392921	6907769	15	22.75	53.76	45.70	0.54
97MOB0054	97MITE-7	392921	6907769	15	14.63	56.89	42.53	0.59
97MOB0058	97MITE-8	393721	6906996	15	21.97	57.14	42.26	0.60
97MOB0059	97MITE-8	393721	6906996	15	13.91	62.94	36.54	0.52
97MOB0060	97MITE-8	393721	6906996	15	19.15	61.75	37.43	0.83
97MOB0061	97MITE-8	393721	6906996	15	5.09	57.16	41.42	1.41
97MOB0062	97MITE-8	393721	6906996	15	7.66	61.21	38.32	0.47
97MOB0066	97MITE-9	394512	6906204	15	16.46	64.26	35.43	0.31
97MOB0067	97MITE-9	394512	6906204	15	4.78	53.71	45.37	0.92
97MOB0068	97MITE-9	394512	6906204	15	3.45	49.21	50.15	0.65
97MOB0069	97MITE-9	394512	6906204	15	2.66	47.23	51.98	0.80
97MOB0070	97MITE-9	394512	6906204	15	5.44	53.43	46.20	0.37
97MOB0074	97MITE-10	395217	6905369	15	6.94	50.02	49.47	0.51
97MOB0075	97MITE-10	395217	6905369	15	7.53	51.07	48.05	0.89
97MOB0076	97MITE-10	395217	6905369	15	5.46	47.62	51.13	1.25
97MOB0077	97MITE-10	395217	6905369	15	6.12	48.31	50.28	1.41
97MOB0078	97MITE-10	395217	6905369	15	13.34	52.94	46.85	0.21
97MOB0079	97MITE-10	395217	6905369	15	4.92	68.25	31.15	0.60
97MOB0080	97MITE-10	395217	6905369	15	11.74	57.06	42.47	0.47
97MOB0084	97MITE-E	379569	6909418	15	7.49	42.35	55.08	2.57
97MOB0085	97MITE-F	380429	6908638	15	19.48	49.09	50.17	0.73
97MOB0086	97MITE-G	380484	6908190	15	8.25	48.85	50.62	0.52
97MOB0087	97MITE-H	403250	6914400	15	9.32	60.40	38.91	0.69
97MOB0088	97MITE-I	374031	6900295	15	30.36	67.03	32.57	0.41
97MOB0089	97MITE-J	375392	6899236	15	13.68	63.65	35.34	1.00
97MOB0090	97MITE-K	376942	6897863	15	10.48	45.24	50.55	4.21

Appendix XVa: Sand Silt Clay Distribution

Sample	Station ID	Easting	Northing	UTM	% > 2mm	<2 mm		
						% Sand	% Silt	% Clay
99MOB2001	MOB990164	404026	6916661	15	14.95	56.44	42.07	1.49
99MOB2003	MOB990165	404454	6915898	15	14.65	59.68	38.88	1.44
99MOB2005	MOB990166	405045	6914929	15	13.00	50.39	46.45	3.17
99MOB2007	MOB990167	402005	6914817	15	11.83	66.69	32.74	0.57
99MOB2008	MOB990167	402005	6914817	15	6.41	54.56	43.59	1.85
99MOB2009	MOB990167	402005	6914817	15	6.70	47.28	50.58	2.14
99MOB2010	MOB990167	402005	6914817	15	8.99	57.62	40.93	1.45
99MOB2011	MOB990167	402005	6914817	15	5.27	51.48	46.59	1.93
99MOB2012	MOB990167	402005	6914817	15	5.28	53.75	44.26	1.99
99MOB2014	MOB990167	402005	6914817	15	10.68	58.32	39.49	2.19
99MOB2015	MOB990168	405610	6914374	15	10.57	52.26	44.92	2.82
99MOB2017	MOB990169	407108	6913055	15	12.27	61.57	36.28	2.15
99MOB2019	MOB990170	408214	6911942	15	8.68	59.29	38.56	2.15
99MOB2021	MOB990171	408931	6911230	15	11.85	55.52	42.38	2.09
99MOB2023	MOB990172	409839	6910689	15	32.50	45.43	50.62	3.95
99MOB2025	MOB990173	410937	6909473	15	11.71	55.15	41.55	3.31
99MOB2027	MOB990174	350895	6883517	15	10.82	55.96	42.07	1.96
99MOB2029	MOB990175	349732	6884943	15	14.96	64.52	34.33	1.15
99MOB2030	MOB990175	349732	6884943	15	13.45	47.20	50.99	1.81
99MOB2031	MOB990175	349732	6884943	15	15.18	54.85	43.40	1.75
99MOB2032	MOB990175	349732	6884943	15	17.67	46.36	51.62	2.02
99MOB2033	MOB990175	349732	6884943	15	12.62	60.59	38.18	1.23
99MOB2034	MOB990175	349732	6884943	15	14.09	45.63	52.37	2.00
99MOB2036	MOB990176	350750	6884039	15	18.00	45.02	52.09	2.89
99MOB2038	MOB990177	351670	6882871	15	14.21	49.94	47.06	3.00
99MOB2040	MOB990178	349262	6885450	15	10.82	51.61	45.61	2.78
99MOB2042	MOB990179	421097	6936957	15	7.89	48.39	50.50	1.11
99MOB2044	MOB990180	421422	6937243	15	11.84	47.94	50.22	1.85
99MOB2046	MOB990181	422725	6935968	15	13.94	61.45	37.50	1.04
99MOB2048	MOB990182	421700	6935690	15	18.25	67.51	31.91	0.58
99MOB2049	MOB990182	421700	6935690	15	14.82	68.83	30.50	0.66
99MOB2050	MOB990182	421700	6935690	15	14.39	64.32	35.03	0.64
99MOB2051	MOB990182	421700	6935690	15	13.31	64.32	34.63	1.05
99MOB2052	MOB990182	421700	6935690	15	14.84	65.60	33.46	0.94
99MOB2053	MOB990182	421700	6935690	15	10.91	58.10	40.88	1.02
99MOB2054	MOB990182	421700	6935690	15	13.51	58.16	40.50	1.34
99MOB2073	MOB990197	387813	6902215	15	12.54	53.67	43.43	2.90
99MOB2075	MOB990200	402332	6910418	15	3.42	44.46	53.18	2.37

Appendix XV
Part B: Complete Grain Size Distribution

Note:

Sample preparation:	150-300g of dry bulk material
Analytical Method:	Particle Size Analyzer

Appendix XVb: Complete Grain Size Distribution

Sample	Station ID	Easting	Northing	UTM	Size Fraction in mm, reported as a percentage <2 mm									
					2-1.4	1.4-1	1-.71	.71-.50	.50-.35	.35-.25	.25-.18	.18-.12	.12-.088	.088-.063
99MOB2007	MOB990167	402005	6914817	15	3.72	3.21	4.51	10.64	15.30	10.38	6.05	3.47	4.38	4.49
99MOB2008	MOB990167	402005	6914817	15	2.12	2.23	3.19	5.58	7.99	6.48	5.07	5.00	8.09	7.15
99MOB2009	MOB990167	402005	6914817	15	2.17	1.99	2.64	4.71	6.24	5.13	4.50	4.37	6.52	8.03
99MOB2010	MOB990167	402005	6914817	15	2.58	2.57	3.42	6.03	8.57	6.87	5.22	5.05	8.14	7.48
99MOB2011	MOB990167	402005	6914817	15	2.00	1.89	2.71	5.14	7.00	5.76	4.92	4.59	6.66	9.21
99MOB2012	MOB990167	402005	6914817	15	1.99	2.11	3.14	5.42	8.11	6.59	4.96	4.70	8.16	7.33
99MOB2029	MOB990175	349732	6884943	15	4.43	4.33	5.16	6.27	7.44	7.34	7.62	7.70	7.61	5.65
99MOB2030	MOB990175	349732	6884943	15	2.93	2.73	3.35	4.21	4.91	4.88	5.12	5.29	6.32	5.92
99MOB2031	MOB990175	349732	6884943	15	3.82	3.72	4.54	5.33	6.14	5.97	6.22	6.21	6.50	5.29
99MOB2032	MOB990175	349732	6884943	15	2.71	2.54	3.30	4.42	4.86	4.83	5.54	4.97	5.16	6.46
99MOB2033	MOB990175	349732	6884943	15	4.50	4.05	4.80	5.71	6.66	6.65	6.97	7.08	7.17	5.58
99MOB2034	MOB990175	349732	6884943	15	2.77	2.65	3.29	4.04	4.72	4.67	4.90	5.06	6.16	6.00
99MOB2048	MOB990182	421700	6935690	15	3.00	3.32	4.40	6.31	7.43	7.33	8.63	8.41	8.42	8.60
99MOB2049	MOB990182	421700	6935690	15	3.30	3.21	4.27	5.79	7.46	7.72	8.44	9.20	9.99	7.62
99MOB2050	MOB990182	421700	6935690	15	3.62	3.65	4.22	5.63	6.56	6.55	7.90	7.89	8.05	8.50
99MOB2051	MOB990182	421700	6935690	15	4.03	3.82	4.76	5.75	6.88	6.69	7.13	7.86	8.78	7.10
99MOB2052	MOB990182	421700	6935690	15	4.54	4.06	4.97	6.63	7.44	6.86	7.81	7.27	7.09	7.40
99MOB2053	MOB990182	421700	6935690	15	3.75	3.34	4.27	5.16	6.08	5.84	6.12	6.98	8.20	6.67
99MOB2054	MOB990182	421700	6935690	15	3.81	3.54	4.27	5.56	6.31	6.07	6.94	6.72	6.80	7.07

Appendix XVb: Complete Grain Size Distribution

Sample	Station ID	Easting	Northing	UTM	Size Fraction in mm, reported as a percentage <2 mm							
					.063-.044	.044-.031	.031-.016	.016-.008	.008-.004	.004-.002	.002-.001	< .001
99MOB2007	MOB990167	402005	6914817	15	4.86	4.80	7.77	7.26	6.63	1.96	0.43	0.16
99MOB2008	MOB990167	402005	6914817	15	3.97	7.35	9.94	9.28	10.21	4.43	1.33	0.59
99MOB2009	MOB990167	402005	6914817	15	7.28	6.04	10.68	9.70	12.59	5.23	1.58	0.60
99MOB2010	MOB990167	402005	6914817	15	5.69	6.88	9.91	7.41	9.09	3.56	1.06	0.45
99MOB2011	MOB990167	402005	6914817	15	5.19	5.56	10.61	9.84	11.91	5.02	1.44	0.55
99MOB2012	MOB990167	402005	6914817	15	3.87	3.34	10.16	10.33	12.39	5.35	1.53	0.51
99MOB2029	MOB990175	349732	6884943	15	3.39	4.07	8.64	7.44	8.52	3.20	0.86	0.32
99MOB2030	MOB990175	349732	6884943	15	4.48	6.37	11.87	11.64	13.03	5.08	1.39	0.48
99MOB2031	MOB990175	349732	6884943	15	4.80	4.61	10.16	8.75	11.55	4.60	1.33	0.47
99MOB2032	MOB990175	349732	6884943	15	3.54	4.62	11.40	11.90	15.55	6.12	1.57	0.50
99MOB2033	MOB990175	349732	6884943	15	4.08	3.78	8.00	9.26	10.53	3.91	0.98	0.29
99MOB2034	MOB990175	349732	6884943	15	3.56	6.61	9.69	11.23	16.07	6.55	1.62	0.43
99MOB2048	MOB990182	421700	6935690	15	5.71	5.18	8.24	6.49	5.95	2.01	0.46	0.15
99MOB2049	MOB990182	421700	6935690	15	5.36	5.07	8.45	6.32	5.27	1.83	0.50	0.20
99MOB2050	MOB990182	421700	6935690	15	7.05	7.74	9.39	5.76	4.99	1.82	0.48	0.19
99MOB2051	MOB990182	421700	6935690	15	5.04	5.19	7.94	7.35	7.64	2.95	0.80	0.30
99MOB2052	MOB990182	421700	6935690	15	4.07	4.50	7.63	7.26	8.41	3.07	0.75	0.23
99MOB2053	MOB990182	421700	6935690	15	3.80	5.40	10.45	9.87	9.54	3.48	0.82	0.24
99MOB2054	MOB990182	421700	6935690	15	3.17	5.49	9.51	9.41	10.18	3.78	1.01	0.36

Appendix XVI
Hg Physical Partitioning Studies

Note:

Sample preparation:	about 300g of bulk till freeze-dried for 24 hours; procedure modified from Plouffe (1997) - see also report text.
Analytical Method:	Milestone AMA-254 Hg Analyzer
Detection Limit:	0.5 ppb

Appendix XVIa: Hg Physical Partitioning; Dry Weights of Till

Sample	Station ID	Easting	Northing	UTM	Total Dry Wt (g)	Weight (%) of <2 mm				
						<2µm	2-63µm	63-125µm	125-250µm	250µm-2mm
97MOB0009	97MITE-2	389326	6912075	15	226.49	2.62	23.90	17.66	21.53	34.28
97MOB0014	97MITE-A	389500	6911539	15	263.32	1.07	29.80	7.03	15.08	47.02
97MOB0017	97MITE-3	390102	6911081	15	340.29	1.35	39.22	13.70	17.43	28.30
97MOB0023	97MITE-B	390237	6910960	15	299.19	0.63	31.69	12.55	18.90	36.23
97MOB0024	97MITE-C	390567	6910751	15	354.93	1.12	36.46	12.76	16.83	32.83
97MOB0027	97MITE-4	390745	6910178	15	280.45	2.18	38.66	17.53	17.36	24.27
97MOB0036	97MITE-5	391464	6909375	15	201.58	1.88	29.52	17.31	20.43	30.87
97MOB0045	97MITE-6	392286	6908555	15	335.55	4.56	39.60	11.51	18.27	26.06
97MOB0053	97MITE-7	392921	6907769	15	402.04	1.71	44.67	13.53	14.71	25.37
97MOB0060	97MITE-8	393721	6906996	15	454.78	0.91	35.56	13.09	17.63	32.81
97MOB0068	97MITE-9	394512	6906204	15	126.82	1.54	46.61	11.29	18.36	22.20
97MOB0078	97MITE-10	395217	6905369	15	334.71	1.21	40.30	13.81	19.99	24.68
97MOB0084	97MITE-E	379569	6909418	15	199.89	1.52	18.94	18.26	23.57	37.72
97MOB0085	97MITE-F	380429	6908638	15	252.56	1.70	45.68	13.55	14.85	24.22
97MOB0086	97MITE-G	380484	6908190	15	403.98	2.49	40.40	15.58	17.77	23.77
97MOB0087	97MITE-H	403250	6914400	15	315.23	1.23	35.56	13.38	18.78	31.05
97MOB0088	97MITE-I	374031	6900295	15	358.36	0.57	28.03	11.63	25.33	34.44
97MOB0089	97MITE-J	375392	6899236	15	290.13	0.67	20.43	15.01	17.52	46.38
97MOB0090	97MITE-K	376942	6897863	15	238.76	2.67	23.71	16.50	21.88	35.24

Appendix XVIb: Hg Physical Partitioning; Hg and LOI in Till, <0.002 mm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)	LOI (%)
97MOB0009	97MITE-2	389326	6912075	15	4.6	3.4
97MOB0014	97MITE-A	389500	6911539	15	14.8	6.8
97MOB0017	97MITE-3	390102	6911081	15	4.9	2.8
97MOB0023	97MITE-B	390237	6910960	15	9.3	2.8
97MOB0024	97MITE-C	390567	6910751	15	5.0	1.6
97MOB0027	97MITE-4	390745	6910178	15	3.8	3.4
97MOB0036	97MITE-5	391464	6909375	15	2.9	3.2
97MOB0045	97MITE-6	392286	6908555	15	2.4	2.8
97MOB0053	97MITE-7	392921	6907769	15	6.6	3.0
97MOB0060	97MITE-8	393721	6906996	15	2.7	1.6
97MOB0068	97MITE-9	394512	6906204	15	3.5	1.6
97MOB0078	97MITE-10	395217	6905369	15	4.9	3.0
97MOB0084	97MITE-E	379569	6909418	15	7.0	3.8
97MOB0085	97MITE-F	380429	6908638	15	9.1	5.0
97MOB0086	97MITE-G	380484	6908190	15	4.2	3.0
97MOB0087	97MITE-H	403250	6914400	15	9.3	4.6
97MOB0088	97MITE-I	374031	6900295	15	23.0	9.6
97MOB0089	97MITE-J	375392	6899236	15	23.3	6.6
97MOB0090	97MITE-K	376942	6897863	15	3.9	3.6

Appendix XVIc: Hg Physical Partitioning; Hg and LOI in Till, 2-63 μm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)	LOI (%)
97MOB0009	97MITE-2	389326	6912075	15	0.8	1.0
97MOB0014	97MITE-A	389500	6911539	15	1.1	1.2
97MOB0017	97MITE-3	390102	6911081	15	0.3	0.4
97MOB0023	97MITE-B	390237	6910960	15	0.5	0.4
97MOB0024	97MITE-C	390567	6910751	15	0.5	0.2
97MOB0027	97MITE-4	390745	6910178	15	0.4	0.6
97MOB0036	97MITE-5	391464	6909375	15	0.7	0.4
97MOB0045	97MITE-6	392286	6908555	15	0.3	0.8
97MOB0053	97MITE-7	392921	6907769	15	7.9	0.4
97MOB0060	97MITE-8	393721	6906996	15	0.3	0.4
97MOB0068	97MITE-9	394512	6906204	15	0.6	0.2
97MOB0078	97MITE-10	395217	6905369	15	0.3	0.2
97MOB0084	97MITE-E	379569	6909418	15	1.5	1.4
97MOB0085	97MITE-F	380429	6908638	15	1.0	0.6
97MOB0086	97MITE-G	380484	6908190	15	0.4	0.6
97MOB0087	97MITE-H	403250	6914400	15	0.6	0.6
97MOB0088	97MITE-I	374031	6900295	15	2.4	1.8
97MOB0089	97MITE-J	375392	6899236	15	0.9	0.8
97MOB0090	97MITE-K	376942	6897863	15	1.3	1.2

Appendix XVId: Hg Physical Partitioning; Hg and LOI in Till, 63-125 µm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)	LOI (%)
97MOB0009	97MITE-2	389326	6912075	15	<0.5	<0.1
97MOB0014	97MITE-A	389500	6911539	15	<0.5	0.2
97MOB0017	97MITE-3	390102	6911081	15	<0.5	<0.1
97MOB0023	97MITE-B	390237	6910960	15	<0.5	0.2
97MOB0024	97MITE-C	390567	6910751	15	<0.5	<0.1
97MOB0027	97MITE-4	390745	6910178	15	<0.5	0.1
97MOB0036	97MITE-5	391464	6909375	15	<0.5	<0.1
97MOB0045	97MITE-6	392286	6908555	15	<0.5	0.2
97MOB0053	97MITE-7	392921	6907769	15	<0.5	<0.1
97MOB0060	97MITE-8	393721	6906996	15	<0.5	0.1
97MOB0068	97MITE-9	394512	6906204	15	<0.5	<0.1
97MOB0078	97MITE-10	395217	6905369	15	<0.5	0.1
97MOB0084	97MITE-E	379569	6909418	15	<0.5	<0.1
97MOB0085	97MITE-F	380429	6908638	15	<0.5	0.2
97MOB0086	97MITE-G	380484	6908190	15	<0.5	0.2
97MOB0087	97MITE-H	403250	6914400	15	<0.5	0.2
97MOB0088	97MITE-I	374031	6900295	15	<0.5	<0.1
97MOB0089	97MITE-J	375392	6899236	15	<0.5	0.2
97MOB0090	97MITE-K	376942	6897863	15	<0.5	0.2

Appendix XVIe: Hg Physical Partitioning; Hg and LOI in Till, 125-250 µm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)	LOI (%)
97MOB0009	97MITE-2	389326	6912075	15	<0.5	<0.1
97MOB0014	97MITE-A	389500	6911539	15	<0.5	0.2
97MOB0017	97MITE-3	390102	6911081	15	<0.5	0.2
97MOB0023	97MITE-B	390237	6910960	15	<0.5	<0.1
97MOB0024	97MITE-C	390567	6910751	15	<0.5	0.4
97MOB0027	97MITE-4	390745	6910178	15	<0.5	<0.1
97MOB0036	97MITE-5	391464	6909375	15	<0.5	<0.1
97MOB0045	97MITE-6	392286	6908555	15	<0.5	<0.1
97MOB0053	97MITE-7	392921	6907769	15	<0.5	0.2
97MOB0060	97MITE-8	393721	6906996	15	<0.5	<0.1
97MOB0068	97MITE-9	394512	6906204	15	<0.5	0.2
97MOB0078	97MITE-10	395217	6905369	15	<0.5	<0.1
97MOB0084	97MITE-E	379569	6909418	15	<0.5	<0.1
97MOB0085	97MITE-F	380429	6908638	15	<0.5	0.2
97MOB0086	97MITE-G	380484	6908190	15	<0.5	<0.1
97MOB0087	97MITE-H	403250	6914400	15	<0.5	<0.1
97MOB0088	97MITE-I	374031	6900295	15	<0.5	0.2
97MOB0089	97MITE-J	375392	6899236	15	<0.5	0.2
97MOB0090	97MITE-K	376942	6897863	15	<0.5	0.4

Appendix XVIf: Hg Physical Partitioning; Hg and LOI in Till, 250 µm - 2 mm fraction

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)	LOI (%)
97MOB0009	97MITE-2	389326	6912075	15	1.1	<0.1
97MOB0014	97MITE-A	389500	6911539	15	<0.5	<0.1
97MOB0017	97MITE-3	390102	6911081	15	<0.5	<0.1
97MOB0023	97MITE-B	390237	6910960	15	<0.5	<0.1
97MOB0024	97MITE-C	390567	6910751	15	<0.5	<0.1
97MOB0027	97MITE-4	390745	6910178	15	0.6	<0.1
97MOB0036	97MITE-5	391464	6909375	15	<0.5	0.2
97MOB0045	97MITE-6	392286	6908555	15	<0.5	0.2
97MOB0053	97MITE-7	392921	6907769	15	<0.5	0.2
97MOB0060	97MITE-8	393721	6906996	15	0.7	<0.1
97MOB0068	97MITE-9	394512	6906204	15	<0.5	0.4
97MOB0078	97MITE-10	395217	6905369	15	0.8	<0.1
97MOB0084	97MITE-E	379569	6909418	15	<0.5	<0.1
97MOB0085	97MITE-F	380429	6908638	15	0.8	0.4
97MOB0086	97MITE-G	380484	6908190	15	1.2	0.2
97MOB0087	97MITE-H	403250	6914400	15	1.5	<0.1
97MOB0088	97MITE-I	374031	6900295	15	<0.5	<0.1
97MOB0089	97MITE-J	375392	6899236	15	0.5	0.4
97MOB0090	97MITE-K	376942	6897863	15	1.5	0.2

Appendix XVII
Hg Fractionation,
HYD-ICP-MS, sodium pyrophosphate leach

Note:

Analytical extraction:	0.1M $Na_4P_2O_7$ for 1 hour, 1 g in 50 ml solution, pH = 10
Analytical Method:	hydride inductively coupled plasma mass spectrometry
Laboratory:	MRD's Analytical Method Development Laboratory
Detection Limit:	2 ppb

Appendix XVIIa: Hg Fractionation in Humus (<2 mm fraction)
by HYD-ICP-MS, Sodium Pyrophosphate Leach

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)	SOC (ppm)
97MOB0003	97MITE-1	388149	6913294	15	7	12000
97MOB0012	97MITE-2	389326	6912075	15	17	25000
97MOB0020	97MITE-3	390102	6911081	15	20	22500
97MOB0030	97MITE-4	390745	6910178	15	8	17200
97MOB0039	97MITE-5	391464	6909375	15	31	26700
97MOB0047	97MITE-6	392286	6908555	15	21	25600
97MOB0055	97MITE-7	392921	6907769	15	15	25400
97MOB0063	97MITE-8	393721	6906996	15	75	75900
97MOB0071	97MITE-9	394512	6906204	15	10	41900
97MOB0081	97MITE-10	395217	6905369	15	31	45800
99MOB2002	MOB990164	404026	6916661	15	30	24400
99MOB2004	MOB990165	404454	6915898	15	30	23300
99MOB2013	MOB990167	402005	6914817	15	14	17000
99MOB2018	MOB990169	407108	6913055	15	28	38800
99MOB2028	MOB990174	350895	6883517	15	13	22200
99MOB2035	MOB990175	349732	6884943	15	32	25500
99MOB2043	MOB990179	421097	6936957	15	25	30800
99MOB2055	MOB990182	421700	6935690	15	15	18600
99MOB2074	MOB990197	387813	6902215	15	36	103200

Appendix XVIIb: Hg Fractionation in Till (<2 µm fraction)
by HYD-ICP-MS, Sodium Pyrophosphate Leach

Sample	Station ID	Easting	Northing	UTM	Hg (ppb)	SOC (ppm)
97MOB0074	MITE-10	395217	6905369	15	8	1100
97MOB0075	MITE-10	395217	6905369	15	4	600
97MOB0076	MITE-10	395217	6905369	15	2	<1000
97MOB0077	MITE-10	395217	6905369	15	2	<1000
97MOB0078	MITE-10	395217	6905369	15	5	300
97MOB0079	MITE-10	395217	6905369	15	3	1000
97MOB0080	MITE-10	395217	6905369	15	5	2300
99MOB2007	MOB990167	402005	6914817	15	18	34500
99MOB2008	MOB990167	402005	6914817	15	13	16800
99MOB2009	MOB990167	402005	6914817	15	11	17700
99MOB2010	MOB990167	402005	6914817	15	18	23600
99MOB2011	MOB990167	402005	6914817	15	8	20500
99MOB2012	MOB990167	402005	6914817	15	<2	5900
99MOB2017	MOB990169	407108	6913055	15	73	18100
99MOB2027	MOB990174	350895	6883517	15	73	24500
99MOB2049	MOB990182	421700	6935690	15	5	9400
99MOB2050	MOB990182	421700	6935690	15	6	9700
99MOB2052	MOB990182	421700	6935690	15	12	13000
99MOB2053	MOB990182	421700	6935690	15	33	21300
99MOB2054	MOB990182	421700	6935690	15	32	32400
99MOB2073	MOB990197	387813	6902215	15	31	5400

Appendix XVIII
Chemical Fractionation Studies
Part A: Humus, <2 mm fraction

Note:

Leach 1 of 4: Sodium Acetate
Analytical extraction: 1M NaOAc for 2 hours, 1 g in 20 ml solution, pH = 8
Analytical Method: inductively coupled plasma mass spectrometry
Laboratory: Chemex Ltd.

Leach 2 of 4: Sodium Pyrophosphate
Analytical extraction: 0.1M $Na_4P_2O_7$ for 1 hour, 1 g in 25 ml solution, pH = 10
Analytical Method: inductively coupled plasma mass spectrometry
Laboratory: Chemex Ltd.

Leach 3 of 4: Hot Hydroxylamine Hydrochloride
Analytical extraction: 0.25M $NH_2OH.HCl$ in 0.25M HCl for 2 hours at 60°C, 1 g in 20 ml solution, pH = 10
Analytical Method: inductively coupled plasma mass spectrometry
Laboratory: Chemex Ltd.

Leach 4 of 4: Hot Aqua Regia
Analytical extraction: Aqua Regia (HCL-HNO_3, 3:1)
Analytical Method: inductively coupled plasma mass spectrometry/ inductively coupled plasma atomic emission spectrometry
Laboratory: Chemex Ltd.

Detection Limits

ICP-MS:

Element	DL
Ag (ppm)	0.002
Al (ppm)	1
As (ppm)	0.1
Au (ppm)	0.05
B (ppm)	2
Ba (ppm)	0.05
Be (ppm)	0.05
Bi (ppm)	0.005
Br (ppm)	2
Ca (ppm)	10
Cd (ppm)	0.01
Ce (ppm)	0.005
Cl (ppm)	5
Co (ppm)	0.05
Cr (ppm)	0.05
Cs (ppm)	0.005
Cu (ppm)	0.05
Dy (ppm)	0.005
Er (ppm)	0.005
Eu (ppm)	0.005
Fe (ppm)	5
Ga (ppm)	0.05
Gd (ppm)	0.005
Ge (ppm)	0.1
Hf (ppm)	0.01
Hg (ppm)	0.1
Ho (ppm)	0.005
I (ppm)	0.1
In (ppm)	0.005
K (ppm)	5
La (ppm)	0.005
Li (ppm)	0.05
Lu (ppm)	0.005
Mg (ppm)	1
Mn (ppm)	0.1
Mo (ppm)	0.01
Nb (ppm)	0.01
Nd (ppm)	0.005
Ni (ppm)	0.05
P (ppm)	5
Pb (ppm)	0.1
Pr (ppm)	0.005
Rb (ppm)	0.01
Re (ppm)	0.001
Sb (ppm)	0.005
Se (ppm)	0.5
Sm (ppm)	0.005
Sn (ppm)	0.05
Sr (ppm)	0.05
Ta (ppm)	0.01
Tb (ppm)	0.005
Te (ppm)	0.05
Th (ppm)	0.01
Ti (ppm)	1
Tl (ppm)	0.005
Tm (ppm)	0.005
U (ppm)	0.005
V (ppm)	0.05
W (ppm)	0.01
Y (ppm)	0.005
Yb (ppm)	0.005
Zn (ppm)	0.2
Zr (ppm)	0.05

ICP-MS/ICP-AES:

Element	DL
Ag (ppm)	0.02
Al (%)	0.01
As (ppm)	0.2
Ba (ppm)	10
Be (ppm)	0.5
Bi (ppm)	0.02
Ca (%)	0.01
Cd (ppm)	0.1
Co (ppm)	1
Cr (ppm)	1
Cu (ppm)	0.5
Fe (%)	0.01
Ga (ppm)	0.5
Ge (ppm)	0.1
Hg (ppm)	0.01
K (%)	0.01
La (ppm)	10
Mg (%)	0.01
Mn (ppm)	5
Mo (ppm)	0.2
Ni (ppm)	1
Pb (ppm)	2
Sb (ppm)	0.1
Sc (ppm)	1
Sr (ppm)	1
Te (ppm)	0.1
Ti (%)	0.01
Tl (ppm)	0.1
U (ppm)	0.05
V (ppm)	1
W (ppm)	0.05
Zn (ppm)	2

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS, Leach 1 of 4: Sodium Acetate

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Cl ppm	Co ppm	Cr ppm	Cs ppm
97MOB0003	97MITE-1	388149	6913294	15	0.002	10	<0.1	<0.05	<2	12.90	<0.05	<0.005	<2	780	0.01	0.295	<5	<0.05	<0.05	<0.005
97MOB0012	97MITE-2	389326	6912075	15	0.002	15	<0.1	<0.05	<2	38.20	<0.05	<0.005	<2	1860	0.06	0.460	<5	0.30	<0.05	<0.005
97MOB0020	97MITE-3	390102	6911081	15	0.002	9	<0.1	<0.05	<2	40.20	<0.05	<0.005	<2	800	0.04	1.020	<5	0.25	<0.05	<0.005
97MOB0030	97MITE-4	390745	6910178	15	0.002	24	<0.1	<0.05	<2	46.00	<0.05	<0.005	<2	1090	0.03	0.705	<5	0.20	<0.05	0.005
97MOB0039	97MITE-5	391464	6909375	15	<0.002	16	<0.1	<0.05	<2	36.20	<0.05	<0.005	2	1470	0.07	1.000	<5	0.05	<0.05	<0.005
97MOB0047	97MITE-6	392286	6908555	15	0.004	14	<0.1	<0.05	<2	33.50	<0.05	<0.005	<2	1710	0.06	0.740	<5	0.15	<0.05	<0.005
97MOB0055	97MITE-7	392921	6907769	15	0.002	22	<0.1	<0.05	<2	31.00	<0.05	<0.005	<2	1770	0.07	0.830	<5	0.10	<0.05	0.005
97MOB0063	97MITE-8	393721	6906996	15	0.006	9	<0.1	<0.05	<2	47.00	<0.05	<0.005	<2	2310	0.06	1.680	<5	0.25	<0.05	0.005
97MOB0071	97MITE-9	394512	6906204	15	0.002	5	<0.1	<0.05	<2	20.80	<0.05	<0.005	<2	2500	0.07	0.475	<5	0.10	<0.05	0.005
97MOB0081	97MITE-10	395217	6905369	15	0.004	19	<0.1	<0.05	<2	27.00	<0.05	<0.005	<2	1670	0.10	0.435	<5	0.50	<0.05	<0.005

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS, Leach 1 of 4: Sodium Acetate

Sample	Station ID	Easting	Northing	UTM	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm	Hg ppm	Ho ppm	I ppm	In ppm	K ppm	La ppm	Li ppm
97MOB0003	97MITE-1	388149	6913294	15	0.20	0.005	<0.005	0.005	20	<0.05	0.030	<0.1	<0.01	<0.1	<0.005	<0.1	<0.005	170	0.195	0.45
97MOB0012	97MITE-2	389326	6912075	15	0.25	0.030	0.005	0.020	45	<0.05	0.035	<0.1	<0.01	<0.1	<0.005	<0.1	<0.005	370	0.270	0.05
97MOB0020	97MITE-3	390102	6911081	15	0.15	0.025	0.005	0.025	25	<0.05	0.050	<0.1	<0.01	<0.1	0.005	<0.1	<0.005	255	0.640	0.05
97MOB0030	97MITE-4	390745	6910178	15	0.30	0.035	0.015	0.025	65	<0.05	0.060	<0.1	<0.01	<0.1	<0.005	<0.1	<0.005	225	0.345	0.15
97MOB0039	97MITE-5	391464	6909375	15	0.35	0.030	0.015	0.025	55	<0.05	0.065	<0.1	<0.01	<0.1	<0.005	<0.1	<0.005	415	0.470	0.15
97MOB0047	97MITE-6	392286	6908555	15	0.35	0.030	0.010	0.020	65	<0.05	0.060	<0.1	<0.01	<0.1	0.005	0.1	<0.005	380	0.420	0.15
97MOB0055	97MITE-7	392921	6907769	15	0.45	0.040	0.020	0.020	65	<0.05	0.060	<0.1	<0.01	<0.1	<0.005	0.1	<0.005	455	0.445	0.15
97MOB0063	97MITE-8	393721	6906996	15	0.45	0.045	0.020	0.035	95	<0.05	0.110	<0.1	<0.01	<0.1	0.005	0.2	<0.005	525	1.000	0.05
97MOB0071	97MITE-9	394512	6906204	15	0.10	0.010	<0.005	0.015	40	<0.05	0.030	<0.1	<0.01	<0.1	<0.005	<0.1	<0.005	175	0.285	0.05
97MOB0081	97MITE-10	395217	6905369	15	0.25	0.015	0.005	0.005	75	<0.05	0.030	<0.1	<0.01	0.2	<0.005	<0.1	<0.005	335	0.255	0.10

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction)
by ICP-MS, Leach 1 of 4: Sodium Acetate

Sample	Station ID	Easting	Northing	UTM	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Nd ppm	Ni ppm	P ppm	Pb ppm	Pr ppm	Rb ppm	Re ppm	Sb ppm	Se ppm	Sm ppm
97MOB0003	97MITE-1	388149	6913294	15	<0.005	152	2.8	0.02	---	<0.01	0.210	0.25	10	1.9	0.040	0.16	<0.001	<0.005	<0.5	0.045
97MOB0012	97MITE-2	389326	6912075	15	<0.005	510	22.9	0.02	---	0.01	0.255	0.25	10	1.2	0.060	0.29	<0.001	<0.005	<0.5	0.075
97MOB0020	97MITE-3	390102	6911081	15	<0.005	237	13.4	0.01	---	<0.01	0.410	0.25	15	0.7	0.110	0.19	<0.001	<0.005	<0.5	0.110
97MOB0030	97MITE-4	390745	6910178	15	<0.005	320	40.3	0.02	---	<0.01	0.385	0.25	5	1.3	0.095	0.29	<0.001	<0.005	<0.5	0.110
97MOB0039	97MITE-5	391464	6909375	15	<0.005	346	53.7	0.02	---	<0.01	0.440	0.25	15	0.5	0.110	0.74	<0.001	<0.005	<0.5	0.120
97MOB0047	97MITE-6	392286	6908555	15	<0.005	443	32.4	0.04	---	<0.01	0.385	0.30	10	0.6	0.090	0.25	<0.001	<0.005	<0.5	0.100
97MOB0055	97MITE-7	392921	6907769	15	<0.005	441	33.8	0.06	---	<0.01	0.430	0.30	15	0.5	0.105	0.35	<0.001	<0.005	<0.5	0.100
97MOB0063	97MITE-8	393721	6906996	15	<0.005	672	13.8	0.09	---	<0.01	0.700	0.45	20	0.9	0.200	1.31	<0.001	<0.005	<0.5	0.165
97MOB0071	97MITE-9	394512	6906204	15	<0.005	680	0.7	0.03	---	<0.01	0.200	0.40	25	0.8	0.050	0.77	<0.001	<0.005	<0.5	0.060
97MOB0081	97MITE-10	395217	6905369	15	<0.005	364	26.0	0.03	---	<0.01	0.180	0.35	20	2.1	0.045	0.48	<0.001	<0.005	<0.5	0.060

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction)
by ICP-MS, Leach 1 of 4: Sodium Acetate

Sample	Station ID	Easting	Northing	UTM	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
97MOB0003	97MITE-1	388149	6913294	15	<0.05	9.55	<0.01	<0.005	<0.05	0.13	<1	<0.005	<0.005	0.020	<0.05	<0.01	0.055	<0.005	1.4	<0.05
97MOB0012	97MITE-2	389326	6912075	15	<0.05	17.90	<0.01	<0.005	<0.05	0.27	<1	<0.005	<0.005	0.020	<0.05	<0.01	0.085	0.005	1.4	0.05
97MOB0020	97MITE-3	390102	6911081	15	<0.05	10.75	<0.01	0.005	<0.05	0.27	<1	<0.005	<0.005	0.010	<0.05	<0.01	0.100	<0.005	1.0	<0.05
97MOB0030	97MITE-4	390745	6910178	15	<0.05	12.35	<0.01	0.005	<0.05	0.25	1	<0.005	<0.005	0.025	<0.05	<0.01	0.135	0.005	0.6	0.05
97MOB0039	97MITE-5	391464	6909375	15	<0.05	15.30	<0.01	0.005	<0.05	0.24	<1	0.005	<0.005	0.020	<0.05	<0.01	0.145	0.005	0.8	0.10
97MOB0047	97MITE-6	392286	6908555	15	<0.05	18.55	<0.01	0.005	<0.05	0.30	1	<0.005	<0.005	0.020	<0.05	<0.01	0.115	0.010	2.4	0.05
97MOB0055	97MITE-7	392921	6907769	15	<0.05	20.40	<0.01	0.005	<0.05	0.38	1	0.005	<0.005	0.020	<0.05	<0.01	0.160	0.010	1.0	0.15
97MOB0063	97MITE-8	393721	6906996	15	<0.05	25.90	<0.01	0.015	<0.05	0.46	<1	0.020	<0.005	0.030	<0.05	<0.01	0.200	0.015	3.2	<0.05
97MOB0071	97MITE-9	394512	6906204	15	<0.05	24.20	<0.01	<0.005	<0.05	0.11	<1	<0.005	<0.005	0.005	<0.05	<0.01	0.075	<0.005	2.0	<0.05
97MOB0081	97MITE-10	395217	6905369	15	<0.05	14.60	<0.01	<0.005	<0.05	0.40	<1	<0.005	<0.005	0.005	<0.05	<0.01	0.080	<0.005	3.4	0.05

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS, Leach 2 of 4: Sodium Pyrophosphate

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Cl ppm	Co ppm	Cr ppm	Cs ppm
97MOB0003	97MITE-1	388149	6913294	15	0.054	709	<0.1	<0.05	<2	16.85	0.10	<0.005	<2	370	0.05	21.900	<5	0.30	1.45	0.015
97MOB0012	97MITE-2	389326	6912075	15	0.054	2070	0.3	<0.05	<2	67.60	0.25	<0.005	<2	1700	0.15	43.900	<5	2.45	2.70	0.035
97MOB0020	97MITE-3	390102	6911081	15	0.050	1595	0.2	<0.05	<2	57.80	0.25	<0.005	<2	590	0.14	51.200	<5	1.75	1.85	0.005
97MOB0030	97MITE-4	390745	6910178	15	0.054	1795	0.6	<0.05	<2	51.10	0.35	0.015	2	530	0.06	39.700	<5	1.45	3.25	0.110
97MOB0039	97MITE-5	391464	6909375	15	0.066	2750	0.5	<0.05	<2	71.20	0.20	0.025	2	1130	0.26	59.900	<5	1.35	3.40	0.105
97MOB0047	97MITE-6	392286	6908555	15	0.064	1680	0.6	<0.05	<2	45.80	0.15	0.040	2	1230	0.19	50.000	<5	3.40	3.15	0.080
97MOB0055	97MITE-7	392921	6907769	15	0.072	2190	0.9	<0.05	<2	46.50	0.20	0.050	2	1290	0.28	63.300	<5	3.85	3.45	0.115
97MOB0063	97MITE-8	393721	6906996	15	0.106	2500	0.7	<0.05	<2	110.00	0.15	0.020	10	2860	0.14	74.100	<5	2.30	3.30	0.005
97MOB0071	97MITE-9	394512	6906204	15	0.056	1850	<0.1	<0.05	<2	49.10	0.05	<0.005	<2	3250	0.27	23.100	<5	0.70	1.45	<0.005
97MOB0081	97MITE-10	395217	6905369	15	0.062	1635	0.3	<0.05	<2	62.30	0.10	<0.005	<2	2160	0.25	18.900	<5	3.05	2.60	0.005

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS, Leach 2 of 4: Sodium Pyrophosphate

Sample	Station ID	Easting	Northing	UTM	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm	Hg ppm	Ho ppm	I ppm	In ppm	K ppm	La ppm	Li ppm
97MOB0003	97MITE-1	388149	6913294	15	2.45	0.760	0.400	0.280	745	0.35	1.500	<0.1	0.07	<0.1	0.115	1.1	<0.005	45	12.600	<0.05
97MOB0012	97MITE-2	389326	6912075	15	4.65	1.525	0.655	0.495	1820	1.25	2.560	<0.1	0.24	0.1	0.210	0.7	<0.005	190	24.000	0.35
97MOB0020	97MITE-3	390102	6911081	15	2.50	1.340	0.530	0.460	1155	1.05	2.390	<0.1	0.08	0.1	0.170	1.2	<0.005	60	24.200	<0.05
97MOB0030	97MITE-4	390745	6910178	15	5.75	1.595	0.845	0.520	2220	1.20	2.700	<0.1	0.27	<0.1	0.240	1.3	<0.005	225	21.900	<0.05
97MOB0039	97MITE-5	391464	6909375	15	5.40	1.770	0.850	0.655	2490	1.50	3.380	<0.1	0.33	0.1	0.265	2.5	<0.005	270	31.200	<0.05
97MOB0047	97MITE-6	392286	6908555	15	5.05	1.690	0.765	0.610	2900	0.95	2.920	<0.1	0.30	0.1	0.240	1.8	<0.005	225	26.000	<0.05
97MOB0055	97MITE-7	392921	6907769	15	5.85	1.990	1.010	0.715	3150	1.05	3.610	<0.1	0.40	0.1	0.300	2.0	<0.005	300	30.000	<0.05
97MOB0063	97MITE-8	393721	6906996	15	5.60	2.080	0.980	0.740	6850	1.90	3.880	<0.1	0.14	0.1	0.305	4.9	<0.005	195	36.200	<0.05
97MOB0071	97MITE-9	394512	6906204	15	1.60	0.695	0.310	0.255	930	0.85	1.235	<0.1	0.05	<0.1	0.095	0.8	<0.005	35	11.550	<0.05
97MOB0081	97MITE-10	395217	6905369	15	3.40	0.570	0.290	0.210	3490	1.10	1.120	<0.1	0.13	0.1	0.095	0.8	<0.005	145	9.300	<0.05

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS, Leach 2 of 4: Sodium Pyrophosphate

Sample	Station ID	Easting	Northing	UTM	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Nd ppm	Ni ppm	P ppm	Pb ppm	Pr ppm	Rb ppm	Re ppm	Sb ppm	Se ppm
97MOB0003	97MITE-1	388149	6913294	15	0.045	40	6.1	0.20	---	0.17	10.800	0.90	---	1.5	2.990	0.27	<0.001	<0.005	<0.5
97MOB0012	97MITE-2	389326	6912075	15	0.080	253	71.7	0.31	---	0.23	18.300	3.15	---	4.1	5.200	0.80	<0.001	0.030	<0.5
97MOB0020	97MITE-3	390102	6911081	15	0.050	77	19.9	0.20	---	0.18	18.050	1.65	---	4.9	5.250	0.26	<0.001	<0.005	<0.5
97MOB0030	97MITE-4	390745	6910178	15	0.095	173	74.4	0.25	---	0.40	18.250	2.35	---	1.4	5.080	1.92	<0.001	<0.005	<0.5
97MOB0039	97MITE-5	391464	6909375	15	0.105	193	354.0	0.37	---	0.37	24.300	2.50	---	2.3	7.110	2.11	<0.001	<0.005	<0.5
97MOB0047	97MITE-6	392286	6908555	15	0.110	211	214.0	0.35	---	0.36	21.700	2.60	---	1.9	6.040	1.56	<0.001	<0.005	<0.5
97MOB0055	97MITE-7	392921	6907769	15	0.120	259	280.0	0.46	---	0.39	25.800	2.60	---	4.0	7.230	2.00	0.001	<0.005	<0.5
97MOB0063	97MITE-8	393721	6906996	15	0.110	378	44.9	0.51	---	0.23	28.800	3.05	---	6.7	8.310	0.67	<0.001	<0.005	<0.5
97MOB0071	97MITE-9	394512	6906204	15	0.030	363	1.2	0.39	---	0.06	8.850	0.75	---	1.7	2.530	0.30	<0.001	<0.005	<0.5
97MOB0081	97MITE-10	395217	6905369	15	0.040	235	38.7	0.35	---	0.14	7.840	1.90	---	5.1	2.180	0.41	<0.001	<0.005	<0.5

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS, Leach 2 of 4: Sodium Pyrophosphate

Sample	Station ID	Easting	Northing	UTM	Sm ppm	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
97MOB0003	97MITE-1	388149	6913294	15	1.715	<0.05	4.10	<0.01	0.185	<0.05	2.67	44	<0.005	0.040	0.660	0.45	0.33	3.330	0.285	2.4	1.90
97MOB0012	97MITE-2	389326	6912075	15	2.900	<0.05	14.40	<0.01	0.330	<0.05	5.36	73	0.040	0.075	0.740	1.80	0.39	5.860	0.525	11.2	7.75
97MOB0020	97MITE-3	390102	6911081	15	2.740	0.05	7.25	<0.01	0.290	<0.05	2.58	61	0.005	0.060	0.500	0.80	0.36	4.710	0.350	4.0	1.75
97MOB0030	97MITE-4	390745	6910178	15	3.070	0.05	6.10	0.01	0.345	<0.05	5.89	69	0.025	0.100	1.060	2.40	0.38	6.770	0.580	3.6	8.95
97MOB0039	97MITE-5	391464	6909375	15	3.730	0.05	11.60	0.03	0.410	<0.05	6.01	79	0.040	0.105	1.145	1.95	0.39	7.850	0.665	10.8	10.25
97MOB0047	97MITE-6	392286	6908555	15	3.470	0.05	12.80	0.02	0.350	<0.05	6.88	69	0.045	0.095	1.240	3.60	0.42	6.870	0.635	13.6	9.10
97MOB0055	97MITE-7	392921	6907769	15	4.330	0.05	13.00	0.02	0.465	<0.05	8.02	67	0.055	0.125	1.295	4.30	0.36	8.290	0.855	15.6	12.80
97MOB0063	97MITE-8	393721	6906996	15	4.500	0.10	29.20	<0.01	0.445	<0.05	3.89	56	0.040	0.100	1.150	2.25	0.36	8.340	0.710	23.6	4.55
97MOB0071	97MITE-9	394512	6906204	15	1.270	<0.05	26.10	<0.01	0.150	<0.05	1.35	31	<0.005	0.030	0.290	0.95	0.30	2.600	0.255	21.6	0.90
97MOB0081	97MITE-10	395217	6905369	15	1.245	<0.05	16.35	<0.01	0.140	<0.05	2.22	40	0.020	0.035	0.335	2.05	0.33	2.610	0.245	22.6	3.85

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction)
by ICP-MS, Leach 3 of 4: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Cl ppm	Co ppm	Cr ppm	Cs ppm
97MOB0003	97MITE-1	388149	6913294	15	0.032	988	<0.1	<0.05	<2	9.45	<0.05	0.015	<2	150	0.03	3.660	---	0.70	1.55	0.185
97MOB0012	97MITE-2	389326	6912075	15	0.056	2640	<0.1	<0.05	2	37.40	0.05	0.015	<2	280	0.06	3.960	---	2.75	4.10	0.335
97MOB0020	97MITE-3	390102	6911081	15	0.040	915	<0.1	<0.05	2	19.65	<0.05	0.025	<2	110	0.03	4.240	---	1.15	1.60	0.165
97MOB0030	97MITE-4	390745	6910178	15	0.036	3980	<0.1	<0.05	2	39.40	0.20	0.035	<2	260	0.03	6.350	---	3.50	6.65	0.315
97MOB0039	97MITE-5	391464	6909375	15	0.074	3260	<0.1	<0.05	2	73.40	0.15	0.010	<2	260	0.10	7.910	---	3.65	4.35	0.290
97MOB0047	97MITE-6	392286	6908555	15	0.052	3940	<0.1	<0.05	2	72.60	0.20	0.025	4	460	0.08	10.650	---	17.55	7.70	0.310
97MOB0055	97MITE-7	392921	6907769	15	0.050	3970	0.1	<0.05	2	79.60	0.15	0.030	<2	430	0.12	15.700	---	17.45	5.95	0.250
97MOB0063	97MITE-8	393721	6906996	15	0.074	1040	<0.1	<0.05	6	51.80	0.05	<0.005	4	510	0.06	7.880	---	1.55	1.40	0.115
97MOB0071	97MITE-9	394512	6906204	15	0.070	585	<0.1	<0.05	2	29.30	<0.05	<0.005	<2	570	0.07	1.910	---	0.55	0.70	0.005
97MOB0081	97MITE-10	395217	6905369	15	0.036	1060	<0.1	<0.05	2	33.60	0.05	<0.005	<2	430	0.06	2.060	---	1.55	1.75	0.070

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS, Leach 3 of 4: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm	Hg ppm	Ho ppm	I ppm	In ppm	K ppm	La ppm	Li ppm
97MOB0003	97MITE-1	388149	6913294	15	3.35	0.175	0.085	0.040	780	0.50	0.275	<0.1	<0.01	<0.1	0.025	0.3	<0.005	135	1.920	1.50
97MOB0012	97MITE-2	389326	6912075	15	2.50	0.150	0.080	0.055	1680	0.80	0.270	<0.1	<0.01	<0.1	0.025	0.3	<0.005	460	2.290	2.90
97MOB0020	97MITE-3	390102	6911081	15	1.70	0.140	0.060	0.045	795	0.45	0.220	<0.1	<0.01	<0.1	0.020	0.3	<0.005	95	2.050	3.20
97MOB0030	97MITE-4	390745	6910178	15	5.75	0.270	0.120	0.080	2470	1.00	0.425	<0.1	<0.01	<0.1	0.040	0.1	<0.005	515	3.420	4.90
97MOB0039	97MITE-5	391464	6909375	15	3.40	0.245	0.100	0.085	1785	0.90	0.395	<0.1	<0.01	<0.1	0.035	0.7	<0.005	490	3.750	3.50
97MOB0047	97MITE-6	392286	6908555	15	4.55	0.330	0.155	0.100	2510	1.05	0.590	<0.1	<0.01	<0.1	0.050	0.8	<0.005	605	5.050	5.70
97MOB0055	97MITE-7	392921	6907769	15	5.00	0.400	0.165	0.125	2450	0.95	0.710	<0.1	<0.01	<0.1	0.060	0.8	<0.005	470	6.340	4.80
97MOB0063	97MITE-8	393721	6906996	15	0.90	0.315	0.135	0.100	2530	0.55	0.520	<0.1	<0.01	<0.1	0.045	1.7	<0.005	90	4.110	0.85
97MOB0071	97MITE-9	394512	6906204	15	0.40	0.080	0.045	0.030	700	0.45	0.145	<0.1	<0.01	<0.1	0.010	0.5	<0.005	35	1.075	0.65
97MOB0081	97MITE-10	395217	6905369	15	0.55	0.085	0.050	0.035	2030	0.70	0.195	<0.1	<0.01	<0.1	0.015	0.1	<0.005	150	1.105	1.25

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction)
by ICP-MS, Leach 3 of 4: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Nd ppm	Ni ppm	P ppm	Pb ppm	Pr ppm	Rb ppm	Re ppm	Sb ppm	Se ppm	Sm ppm	Sn ppm
97MOB0003	97MITE-1	388149	6913294	15	0.005	235	15.5	0.01	---	0.10	1.560	2.50	---	4.1	0.415	2.51	<0.001	0.005	<0.5	0.275	<0.05
97MOB0012	97MITE-2	389326	6912075	15	0.005	763	100.0	0.02	---	0.08	1.525	6.35	---	6.0	0.415	5.29	<0.001	0.010	<0.5	0.270	<0.05
97MOB0020	97MITE-3	390102	6911081	15	<0.005	241	11.1	0.02	---	0.08	1.465	3.60	---	4.8	0.420	2.44	<0.001	<0.005	<0.5	0.230	<0.05
97MOB0030	97MITE-4	390745	6910178	15	0.010	1180	167.5	0.03	---	0.07	2.530	7.35	---	6.1	0.680	6.17	<0.001	<0.005	<0.5	0.425	<0.05
97MOB0039	97MITE-5	391464	6909375	15	0.005	749	658.0	0.03	---	0.07	2.500	6.20	---	6.1	0.700	5.88	<0.001	<0.005	<0.5	0.410	<0.05
97MOB0047	97MITE-6	392286	6908555	15	0.015	1290	798.0	0.03	---	0.08	3.210	8.95	---	7.4	0.970	6.28	<0.001	0.005	<0.5	0.550	<0.05
97MOB0055	97MITE-7	392921	6907769	15	0.015	1095	856.0	0.04	---	0.05	4.360	8.25	---	9.9	1.230	4.76	<0.001	0.005	<0.5	0.690	<0.05
97MOB0063	97MITE-8	393721	6906996	15	0.010	112	21.0	0.05	---	0.05	3.040	4.15	---	4.8	0.835	0.91	<0.001	0.005	<0.5	0.535	<0.05
97MOB0071	97MITE-9	394512	6906204	15	<0.005	44	1.4	0.04	---	0.01	0.705	2.15	---	1.9	0.200	0.13	<0.001	<0.005	<0.5	0.135	<0.05
97MOB0081	97MITE-10	395217	6905369	15	<0.005	137	9.9	0.03	---	0.06	0.845	3.20	---	3.9	0.225	1.02	<0.001	0.005	<0.5	0.165	<0.05

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS, Leach 3 of 4: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Sr ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
97MOB0003	97MITE-1	388149	6913294	15	1.45	<0.01	0.035	<0.05	0.37	24	0.025	0.005	0.160	1.30	<0.01	0.760	0.045	4.2	0.20
97MOB0012	97MITE-2	389326	6912075	15	3.35	<0.01	0.035	<0.05	0.27	18	0.060	0.005	0.180	2.90	<0.01	0.875	0.060	15.6	0.30
97MOB0020	97MITE-3	390102	6911081	15	1.65	<0.01	0.030	<0.05	0.23	16	0.005	0.005	0.115	1.45	<0.01	0.575	0.035	4.6	0.10
97MOB0030	97MITE-4	390745	6910178	15	2.35	<0.01	0.060	<0.05	0.10	23	0.050	0.010	0.155	4.45	<0.01	1.195	0.075	14.6	0.15
97MOB0039	97MITE-5	391464	6909375	15	3.85	<0.01	0.055	<0.05	0.13	18	0.070	0.010	0.165	3.05	<0.01	1.135	0.060	17.8	0.20
97MOB0047	97MITE-6	392286	6908555	15	5.00	<0.01	0.065	<0.05	0.16	25	0.085	0.015	0.225	5.65	<0.01	1.510	0.105	29.6	0.25
97MOB0055	97MITE-7	392921	6907769	15	6.55	<0.01	0.085	<0.05	0.08	14	0.080	0.020	0.195	5.30	<0.01	1.775	0.100	25.6	0.30
97MOB0063	97MITE-8	393721	6906996	15	7.00	<0.01	0.060	<0.05	0.44	11	0.015	0.015	0.305	2.30	0.01	1.385	0.080	7.0	0.15
97MOB0071	97MITE-9	394512	6906204	15	8.00	<0.01	0.015	<0.05	0.12	6	<0.005	<0.005	0.110	1.20	<0.01	0.455	0.020	4.0	<0.05
97MOB0081	97MITE-10	395217	6905369	15	4.55	<0.01	0.020	<0.05	0.28	11	<0.005	0.005	0.110	2.45	<0.01	0.485	0.030	12.8	0.20

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS/ICP-AES, Leach 4 of 4: Aqua Regia

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hg ppm	K %	La ppm
97MOB0003	97MITE-1	388149	6913294	15	0.06	0.23	1.0	<10	<0.5	0.08	0.09	<0.1	1	7	3.0	0.58	1.3	<0.1	<0.01	0.04	<10
97MOB0012	97MITE-2	389326	6912075	15	0.08	0.59	1.2	30	<0.5	0.12	0.12	<0.1	2	12	10.2	0.68	2.4	<0.1	0.09	0.14	<10
97MOB0020	97MITE-3	390102	6911081	15	0.02	0.25	1.0	10	<0.5	0.08	0.11	<0.1	1	8	4.2	0.58	1.3	<0.1	0.14	0.04	<10
97MOB0030	97MITE-4	390745	6910178	15	0.12	1.03	0.8	40	<0.5	0.12	0.14	<0.1	3	20	9.0	1.19	3.8	0.1	0.04	0.23	10
97MOB0039	97MITE-5	391464	6909375	15	0.06	0.79	0.8	40	<0.5	0.14	0.10	<0.1	2	14	8.4	0.82	2.9	<0.1	0.09	0.18	<10
97MOB0047	97MITE-6	392286	6908555	15	0.08	1.03	1.4	50	<0.5	0.18	0.18	<0.1	6	22	12.4	1.35	4.1	<0.1	0.09	0.22	10
97MOB0055	97MITE-7	392921	6907769	15	0.08	1.05	1.6	50	<0.5	0.16	0.18	<0.1	6	21	13.8	1.39	4.0	<0.1	0.05	0.20	10
97MOB0063	97MITE-8	393721	6906996	15	0.02	0.10	0.8	10	<0.5	0.06	0.04	<0.1	1	3	9.2	0.18	0.5	<0.1	0.16	0.01	<10
97MOB0071	97MITE-9	394512	6906204	15	0.02	0.05	0.6	10	<0.5	0.02	0.03	<0.1	<1	2	6.2	0.06	0.3	<0.1	0.06	0.01	<10
97MOB0081	97MITE-10	395217	6905369	15	0.02	0.19	1.0	20	<0.5	0.04	0.05	<0.1	1	4	7.6	0.21	0.8	<0.1	0.12	0.05	<10

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS/ICP-AES, Leach 4 of 4: Aqua Regia

Sample	Station ID	Easting	Northing	UTM	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Te ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0003	97MITE-1	388149	6913294	15	0.10	45	<0.2	---	2	---	2	<0.1	<1	18	<0.1	0.03	<0.1	0.60	9	0.30	6
97MOB0012	97MITE-2	389326	6912075	15	0.18	60	0.2	---	5	---	2	<0.1	1	23	<0.1	0.04	0.1	0.40	10	0.25	12
97MOB0020	97MITE-3	390102	6911081	15	0.14	45	0.2	---	3	---	<2	<0.1	<1	21	<0.1	0.04	<0.1	0.40	8	0.20	8
97MOB0030	97MITE-4	390745	6910178	15	0.34	100	0.2	---	7	---	2	<0.1	2	31	<0.1	0.06	0.1	0.55	15	0.35	22
97MOB0039	97MITE-5	391464	6909375	15	0.21	115	0.4	---	4	---	2	<0.1	1	28	<0.1	0.04	0.1	0.50	11	0.25	16
97MOB0047	97MITE-6	392286	6908555	15	0.38	185	0.6	---	8	---	4	0.1	2	39	<0.1	0.07	0.2	0.65	19	0.35	26
97MOB0055	97MITE-7	392921	6907769	15	0.39	230	0.6	---	9	---	6	0.1	2	39	<0.1	0.07	0.3	0.65	20	0.35	28
97MOB0063	97MITE-8	393721	6906996	15	0.03	10	0.2	---	3	---	<2	0.1	<1	7	<0.1	<0.01	<0.1	0.15	2	0.20	2
97MOB0071	97MITE-9	394512	6906204	15	<0.1	<5	0.6	---	1	---	<2	<0.1	<1	7	<0.1	<0.01	<0.1	0.20	1	<0.05	<2
97MOB0081	97MITE-10	395217	6905369	15	0.04	15	0.2	---	2	---	<2	<0.1	<1	8	<0.1	0.01	<0.1	0.10	3	0.05	6

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction)
by ICP-MS, Sodium Pyrophosphate Leach (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm	Cu ppm
99MOB2013	MOB990167	402005	6914817	15	0.014	649	0.3	<0.05	<2	61.90	0.05	<0.005	6	6050	0.29	9.910	1.60	0.25	0.005	1.55
99MOB2035	MOB990175	349732	6884943	15	0.026	648	0.2	<0.05	<2	65.30	0.05	<0.005	6	4870	0.53	1.485	0.60	0.35	0.035	1.20
99MOB2055	MOB990182	421700	6935690	15	0.012	876	0.1	<0.05	<2	40.00	0.05	<0.005	2	2980	0.31	8.640	1.65	0.15	0.005	2.45

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction) by ICP-MS, Sodium Pyrophosphate Leach (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm	Hg ppm	Ho ppm	I ppm	In ppm	K ppm	La ppm	Li ppm	Lu ppm
99MOB2013	MOB990167	402005	6914817	15	0.300	0.155	0.115	355	<0.05	0.540	<0.1	0.05	<0.1	0.055	1.4	<0.005	915	4.940	0.10	0.020
99MOB2035	MOB990175	349732	6884943	15	0.060	0.025	0.020	265	<0.05	0.095	<0.1	0.01	0.1	0.010	1.2	<0.005	480	0.730	0.05	<0.005
99MOB2055	MOB990182	421700	6935690	15	0.200	0.085	0.090	625	<0.05	0.385	<0.1	0.01	<0.1	0.030	1.0	<0.005	370	4.120	0.05	0.010

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction)
by ICP-MS, Sodium Pyrophosphate Leach (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Nd ppm	Ni ppm	P ppm	Pb ppm	Pr ppm	Re ppm	Rb ppm	Sb ppm	Se ppm	Sm ppm
99MOB2013	MOB990167	402005	6914817	15	1345	37.3	0.16	-----	0.03	4.230	1.40	-----	2.8	1.155	<0.001	1.50	<0.005	<0.5	0.760
99MOB2035	MOB990175	349732	6884943	15	673	31.0	0.07	-----	0.03	0.620	0.35	-----	1.3	0.180	<0.001	2.97	<0.005	<0.5	0.215
99MOB2055	MOB990182	421700	6935690	15	472	7.6	0.09	-----	0.01	3.280	1.05	-----	0.4	0.920	<0.001	1.95	<0.005	<0.5	0.605

Appendix XVIIIa: Chemical Fractionation in Humus (<2 mm fraction)
by ICP-MS, Sodium Pyrophosphate Leach (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
99MOB2013	MOB990167	402005	6914817	15	<0.05	33.00	<0.01	0.065	<0.05	1.63	12	0.020	0.020	0.370	0.35	<0.01	1.575	0.165	28.2	2.30
99MOB2035	MOB990175	349732	6884943	15	<0.05	16.95	<0.01	0.015	<0.05	0.21	18	0.005	<0.005	0.050	0.25	<0.01	0.260	0.025	45.2	0.90
99MOB2055	MOB990182	421700	6935690	15	<0.05	15.20	<0.01	0.050	<0.05	0.67	16	0.020	0.010	0.215	0.25	0.01	1.015	0.085	16.6	0.75

Appendix XVIII
Chemical Fractionation Studies
Part B: Till, <0.002 mm fraction

Note:

Leach 1 of 3: Sodium Pyrophosphate
Analytical extraction: 0.1M $Na_4P_2O_7$ for 1 hour, 1 g in 25 ml solution, pH = 10
Analytical Method: inductively coupled plasma mass spectrometry
Laboratory: Chemex Ltd.

Leach 2 of 3: Hot Hydroxylamine Hydrochloride
Analytical extraction: 0.25M $NH_2OH.HCl$ in 0.25M HCl for 2 hours at 60°C, 1 g in 20 ml solution, pH = 10
Analytical Method: inductively coupled plasma mass spectrometry
Laboratory: Chemex Ltd.

Leach 3 of 3: Hot Aqua Regia
Analytical extraction: Aqua Regia (HCL-HNO_3, 3:1)
Analytical Method: inductively coupled plasma mass spectrometry/
inductively coupled plasma atomic emission spectrometry
Laboratory: Chemex Ltd.

Detection Limits

ICP-MS:

Element	DL	Element	DL	Element	DL
Ag (ppm)	0.002	Ga (ppm)	0.05	Pr (ppm)	0.005
Al (ppm)	1	Gd (ppm)	0.005	Rb (ppm)	0.01
As (ppm)	0.1	Ge (ppm)	0.1	Re (ppm)	0.001
Au (ppm)	0.05	Hf (ppm)	0.01	Sb (ppm)	0.005
B (ppm)	2	Hg (ppm)	0.1	Se (ppm)	0.5
Ba (ppm)	0.05	Ho (ppm)	0.005	Sm (ppm)	0.005
Be (ppm)	0.05	I (ppm)	0.1	Sn (ppm)	0.05
Bi (ppm)	0.005	In (ppm)	0.005	Sr (ppm)	0.05
Br (ppm)	2	K (ppm)	5	Ta (ppm)	0.01
Ca (ppm)	10	La (ppm)	0.005	Tb (ppm)	0.005
Cd (ppm)	0.01	Li (ppm)	0.05	Te (ppm)	0.05
Ce (ppm)	0.005	Lu (ppm)	0.005	Th (ppm)	0.01
Cl (ppm)	5	Mg (ppm)	1	Ti (ppm)	1
Co (ppm)	0.05	Mn (ppm)	0.1	Tl (ppm)	0.005
Cr (ppm)	0.05	Mo (ppm)	0.01	Tm (ppm)	0.005
Cs (ppm)	0.005	Na (ppm)	10	U (ppm)	0.005
Cu (ppm)	0.05	Nb (ppm)	0.01	V (ppm)	0.05
Dy (ppm)	0.005	Nd (ppm)	0.005	W (ppm)	0.01
Er (ppm)	0.005	Ni (ppm)	0.05	Y (ppm)	0.005
Eu (ppm)	0.005	P (ppm)	5	Yb (ppm)	0.005
Fe (ppm)	5	Pb (ppm)	0.1	Zn (ppm)	0.2
				Zr (ppm)	0.05

ICP-MS/ICP-AES:

Element	DL	Element	DL
Ag (ppm)	0.02	Mg (%)	0.01
Al (%)	0.01	Mn (ppm)	5
As (ppm)	0.2	Mo (ppm)	0.2
Ba (ppm)	10	Ni (ppm)	1
Be (ppm)	0.5	Pb (ppm)	2
Bi (ppm)	0.02	Sb (ppm)	0.1
Ca (%)	0.01	Sc (ppm)	1
Cd (ppm)	0.1	Sr (ppm)	1
Co (ppm)	1	Te (ppm)	0.1
Cr (ppm)	1	Ti (%)	0.01
Cu (ppm)	0.5	Tl (ppm)	0.1
Fe (%)	0.01	U (ppm)	0.05
Ga (ppm)	0.5	V (ppm)	1
Ge (ppm)	0.1	W (ppm)	0.05
Hg (ppm)	0.01	Zn (ppm)	2
K (%)	0.01		
La (ppm)	10		

Appendix XVIIIb - Chemical Fractionation in Till (<2 µm)
by ICP-MS, Leach 1 of 3: Sodium Pyrophosphate

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Cl ppm	Co ppm	Cr ppm
97MOB0005	97MITE-2	389326	6912075	15	0.134	7090	0.5	<0.05	6	143.50	0.55	0.025	<2	2460	0.12	18.350	<5	1.15	7.85
97MOB0006	97MITE-2	389326	6912075	15	0.060	6660	0.5	<0.05	6	157.00	0.35	0.010	<2	2580	0.06	14.050	<5	1.05	5.85
97MOB0007	97MITE-2	389326	6912075	15	0.058	6420	0.4	<0.05	6	160.50	0.35	0.020	<2	2450	0.03	12.500	<5	0.95	5.95
97MOB0008	97MITE-2	389326	6912075	15	0.050	7190	0.4	<0.05	8	161.50	0.35	0.020	<2	2370	0.06	13.200	<5	1.10	6.55
97MOB0009	97MITE-2	389326	6912075	15	0.060	6390	0.3	<0.05	8	143.50	0.35	0.010	<2	2170	0.27	14.050	<5	1.05	6.50
97MOB0010	97MITE-2	389326	6912075	15	0.058	6450	0.5	<0.05	8	139.50	0.35	0.020	<2	2020	0.06	15.300	<5	1.05	6.30
97MOB0011	97MITE-2	389326	6912075	15	0.056	5140	0.4	<0.05	6	123.50	0.20	0.010	<2	1970	0.04	15.650	<5	1.10	5.15
97MOB0014	97MITE-A	389500	6911539	15	0.072	2360	0.5	<0.05	6	73.50	0.25	0.040	2	1100	0.05	63.900	<5	1.25	6.35
97MOB0015	97MITE-3	390102	6911081	15	0.086	4280	0.9	<0.05	6	58.10	0.25	0.080	2	860	0.06	41.600	<5	2.95	6.35
97MOB0016	97MITE-3	390102	6911081	15	0.096	4020	0.8	<0.05	6	60.30	0.25	0.080	4	860	0.03	41.500	<5	2.80	6.00
97MOB0017	97MITE-3	390102	6911081	15	0.090	3150	0.6	<0.05	2	49.20	0.20	0.050	2	720	0.05	44.200	<5	2.20	4.75
97MOB0018	97MITE-3	390102	6911081	15	0.086	2550	0.7	<0.05	<2	54.30	0.40	0.070	2	750	0.04	62.500	<5	2.20	4.60
97MOB0019	97MITE-3	390102	6911081	15	0.094	3030	1.0	<0.05	<2	47.40	0.45	0.080	2	620	0.04	110.500	<5	2.70	5.40
97MOB0038	97MITE-5	391464	6909375	15	0.070	2150	0.4	<0.05	<2	98.40	0.35	0.035	2	1350	0.02	33.500	<5	0.50	4.60
97MOB0066	97MITE-9	394512	6906204	15	0.170	7000	2.2	<0.05	<2	108.50	0.65	0.215	12	1660	0.07	175.000	<5	4.45	15.80
97MOB0067	97MITE-9	394512	6906204	15	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss	nol/ss
97MOB0068	97MITE-9	394512	6906204	15	0.134	5200	1.8	<0.05	<2	52.60	0.95	0.135	8	340	0.04	137.500	<5	2.05	9.10
97MOB0069	97MITE-9	394512	6906204	15	0.128	4630	1.7	<0.05	<2	45.50	0.65	0.160	6	260	0.04	123.500	<5	1.80	9.10
97MOB0070	97MITE-9	394512	6906204	15	0.138	5040	2.1	<0.05	<2	45.00	0.75	0.160	8	320	0.04	125.500	<5	1.75	10.80
97MOB0074	97MITE-10	395217	6905369	15	0.044	2130	0.5	<0.05	<2	119.50	0.30	<0.005	<2	1480	0.05	12.200	<5	0.60	2.50
97MOB0075	97MITE-10	395217	6905369	15	0.058	2850	0.7	<0.05	<2	129.00	0.30	<0.005	<2	1960	0.04	15.250	<5	0.70	4.00
97MOB0076	97MITE-10	395217	6905369	15	0.048	2750	0.3	<0.05	<2	143.50	0.30	0.015	<2	1890	0.03	7.660	<5	0.50	2.85
97MOB0077	97MITE-10	395217	6905369	15	0.038	2170	0.4	<0.05	<2	125.50	0.20	<0.005	<2	1610	0.03	6.490	<5	0.40	2.05
97MOB0078	97MITE-10	395217	6905369	15	0.036	852	0.3	<0.05	<2	59.70	0.05	<0.005	<2	700	0.03	10.000	<5	0.35	1.00
97MOB0079	97MITE-10	395217	6905369	15	0.064	1150	0.3	<0.05	<2	86.80	0.15	0.015	<2	1320	0.05	27.900	<5	0.55	2.20
97MOB0080	97MITE-10	395217	6905369	15	0.062	1280	0.4	<0.05	<2	80.20	0.25	0.035	<2	1290	0.06	47.200	<5	0.70	3.20
97MOB0088	97MITE-I	374031	6900295	15	0.168	6720	1.8	<0.05	<2	84.10	0.85	0.270	10	1310	0.04	184.500	<5	6.60	16.75
97MOB0089	97MITE-J	375392	6899236	15	0.078	2160	0.7	<0.05	<2	62.00	0.40	0.060	4	1950	0.14	101.000	<5	1.30	9.05

Appendix XVIIIb - Chemical Fractionation in Till (<2 µm)
by ICP-MS, Leach 1 of 3: Sodium Pyrophosphate

Sample	Station ID	Easting	Northing	UTM	Cs ppm	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm	Hg ppm	Ho ppm	I ppm	In ppm	K ppm
97MOB0005	97MITE-2	389326	6912075	15	0.785	17.15	1.195	0.660	0.355	3630	4.45	1.700	<0.1	1.09	<0.1	0.195	0.5	<0.005	2280
97MOB0006	97MITE-2	389326	6912075	15	0.770	12.60	0.805	0.415	0.240	2800	4.90	1.200	<0.1	0.39	<0.1	0.130	0.3	<0.005	2680
97MOB0007	97MITE-2	389326	6912075	15	0.745	13.20	0.740	0.425	0.275	2700	4.90	1.200	<0.1	0.39	<0.1	0.130	0.3	<0.005	2480
97MOB0008	97MITE-2	389326	6912075	15	0.815	12.30	0.820	0.395	0.265	3020	5.25	1.150	<0.1	0.37	<0.1	0.120	0.4	<0.005	2850
97MOB0009	97MITE-2	389326	6912075	15	0.760	13.75	0.920	0.520	0.255	3020	4.85	1.350	<0.1	0.50	<0.1	0.165	0.4	<0.005	2360
97MOB0010	97MITE-2	389326	6912075	15	0.810	13.85	0.940	0.530	0.285	3040	4.80	1.490	<0.1	0.53	<0.1	0.180	0.3	<0.005	2390
97MOB0011	97MITE-2	389326	6912075	15	0.660	12.85	0.870	0.485	0.285	2510	4.05	1.350	<0.1	0.42	<0.1	0.150	0.3	<0.005	1965
97MOB0014	97MITE-A	389500	6911539	15	0.130	14.20	1.555	0.665	0.605	2210	2.00	3.010	<0.1	0.51	<0.1	0.220	1.9	<0.005	480
97MOB0015	97MITE-3	390102	6911081	15	0.635	11.30	1.050	0.485	0.355	3380	2.45	1.785	<0.1	0.54	<0.1	0.140	2.9	<0.005	690
97MOB0016	97MITE-3	390102	6911081	15	0.505	11.85	1.085	0.480	0.400	3090	2.25	1.955	<0.1	0.56	<0.1	0.145	2.6	<0.005	610
97MOB0017	97MITE-3	390102	6911081	15	0.360	11.00	1.080	0.470	0.410	2450	1.80	1.895	<0.1	0.49	<0.1	0.135	1.9	<0.005	485
97MOB0018	97MITE-3	390102	6911081	15	0.330	11.10	1.520	0.665	0.550	1975	1.65	2.800	<0.1	0.52	<0.1	0.215	2.4	<0.005	380
97MOB0019	97MITE-3	390102	6911081	15	0.320	14.20	2.360	0.950	0.955	2320	1.65	4.680	0.1	0.59	<0.1	0.325	2.4	<0.005	390
97MOB0038	97MITE-5	391464	6909375	15	0.275	8.45	1.175	0.625	0.430	1720	2.35	2.150	<0.1	0.56	<0.1	0.185	1.4	<0.005	630
97MOB0066	97MITE-9	394512	6906204	15	0.570	18.10	4.690	1.935	1.725	6680	3.45	8.800	0.1	0.68	<0.1	0.900	11.2	0.005	405
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
97MOB0068	97MITE-9	394512	6906204	15	0.390	11.65	3.710	1.490	1.435	4300	1.90	6.970	0.1	0.59	<0.1	0.490	6.5	<0.005	285
97MOB0069	97MITE-9	394512	6906204	15	0.365	11.40	3.360	1.350	1.385	3920	1.75	6.450	<0.1	0.59	<0.1	0.465	5.9	<0.005	265
97MOB0070	97MITE-9	394512	6906204	15	0.370	12.35	3.750	1.570	1.445	4710	2.00	7.090	0.1	0.70	0.1	0.510	7.9	<0.005	270
97MOB0074	97MITE-10	395217	6905369	15	0.295	12.85	0.780	0.415	0.260	1165	2.75	1.295	<0.1	0.25	<0.1	0.130	0.1	<0.005	950
97MOB0075	97MITE-10	395217	6905369	15	0.405	17.40	0.965	0.500	0.330	1620	3.20	1.620	<0.1	0.39	<0.1	0.165	0.5	<0.005	1175
97MOB0076	97MITE-10	395217	6905369	15	0.350	13.50	0.820	0.475	0.280	1260	3.15	1.360	<0.1	0.26	<0.1	0.150	0.5	<0.005	1000
97MOB0077	97MITE-10	395217	6905369	15	0.260	11.25	0.715	0.445	0.240	985	2.65	1.150	<0.1	0.21	<0.1	0.135	0.4	<0.005	810
97MOB0078	97MITE-10	395217	6905369	15	0.115	7.85	0.565	0.315	0.200	500	1.20	0.965	<0.1	0.13	<0.1	0.095	0.2	<0.005	410
97MOB0079	97MITE-10	395217	6905369	15	0.130	14.65	1.315	0.695	0.470	1075	1.70	2.330	<0.1	0.31	<0.1	0.200	0.6	<0.005	415
97MOB0080	97MITE-10	395217	6905369	15	0.155	19.25	1.615	0.760	0.555	1490	1.70	2.810	<0.1	0.41	<0.1	0.240	0.6	<0.005	415
97MOB0088	97MITE-I	374031	6900295	15	0.535	51.50	6.450	2.950	2.340	12360	2.85	12.450	0.2	1.21	<0.1	0.930	9.2	0.005	465
97MOB0089	97MITE-J	375392	6899236	15	0.145	25.50	3.950	1.735	1.510	1945	1.45	7.970	0.1	0.49	<0.1	0.520	4.9	<0.005	310

Appendix XVIIIb - Chemical Fractionation in Till (<2 μm)
by ICP-MS, Leach 1 of 3: Sodium Pyrophosphate

Sample	Station ID	Easting	Northing	UTM	La ppm	Li ppm	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Nd ppm	Ni ppm	P ppm	Pb ppm	Pr ppm	Rb ppm	Re ppm
97MOB0005	97MITE-2	389326	6912075	15	14.450	3.15	0.085	1725	43.2	0.14	---	0.91	10.800	6.70	---	5.6	3.070	13.90	0.001
97MOB0006	97MITE-2	389326	6912075	15	10.600	3.65	0.060	1575	36.1	0.15	---	0.73	7.780	5.35	---	4.7	2.200	15.75	<0.001
97MOB0007	97MITE-2	389326	6912075	15	10.300	4.15	0.065	1585	33.3	0.14	---	0.67	7.840	5.15	---	3.8	2.070	15.20	<0.001
97MOB0008	97MITE-2	389326	6912075	15	10.550	4.55	0.060	1660	38.0	0.13	---	0.84	7.760	5.55	---	3.6	2.180	16.55	<0.001
97MOB0009	97MITE-2	389326	6912075	15	11.450	4.60	0.070	1560	34.7	0.18	---	0.71	8.810	6.55	---	3.5	2.410	15.00	<0.001
97MOB0010	97MITE-2	389326	6912075	15	12.650	5.00	0.075	1575	36.6	0.15	---	0.74	9.750	5.75	---	3.6	2.610	15.15	<0.001
97MOB0011	97MITE-2	389326	6912075	15	11.300	2.85	0.065	1290	39.8	0.17	---	0.70	8.710	4.45	---	2.6	2.370	12.35	<0.001
97MOB0014	97MITE-A	389500	6911539	15	29.700	<0.05	0.070	241	65.8	0.26	---	0.64	23.100	2.30	---	2.3	6.540	2.13	<0.001
97MOB0015	97MITE-3	390102	6911081	15	15.650	0.35	0.055	647	63.1	0.43	---	1.34	13.450	3.35	---	5.1	3.690	7.38	<0.001
97MOB0016	97MITE-3	390102	6911081	15	16.700	0.05	0.060	558	62.9	0.32	---	1.32	14.250	3.25	---	3.8	3.940	6.62	0.001
97MOB0017	97MITE-3	390102	6911081	15	20.100	0.85	0.050	429	47.3	0.30	---	1.02	15.000	3.25	---	5.7	4.220	5.11	<0.001
97MOB0018	97MITE-3	390102	6911081	15	29.400	0.15	0.060	388	51.6	0.33	---	0.99	22.500	2.35	---	5.2	6.420	4.28	0.001
97MOB0019	97MITE-3	390102	6911081	15	54.900	<0.05	0.085	396	64.1	0.39	---	1.34	39.800	2.55	---	3.6	11.700	4.77	0.001
97MOB0038	97MITE-5	391464	6909375	15	20.600	<0.05	0.065	884	19.9	0.24	---	0.63	15.650	2.50	---	2.0	4.440	4.96	0.002
97MOB0066	97MITE-9	394512	6906204	15	85.200	<0.05	0.175	482	114.0	0.68	---	2.49	69.300	3.30	---	5.3	19.850	6.41	<0.001
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	---	not/ss	not/ss	not/ss	---	not/ss	not/ss	not/ss	not/ss
97MOB0068	97MITE-9	394512	6906204	15	62.500	0.40	0.135	263	55.2	0.54	---	2.36	55.400	1.95	---	4.0	15.400	4.82	<0.001
97MOB0069	97MITE-9	394512	6906204	15	54.100	<0.05	0.125	251	56.9	0.58	---	2.44	49.900	1.60	---	3.9	13.950	4.57	<0.001
97MOB0070	97MITE-9	394512	6906204	15	53.900	0.30	0.150	239	59.5	0.62	---	2.60	51.700	1.55	---	4.8	14.500	4.68	<0.001
97MOB0074	97MITE-10	395217	6905369	15	9.870	2.00	0.065	784	24.6	0.20	---	0.30	7.850	2.70	---	2.1	2.070	5.73	0.001
97MOB0075	97MITE-10	395217	6905369	15	13.000	2.75	0.080	958	22.1	0.21	---	0.41	10.150	3.70	---	1.9	2.770	7.46	<0.001
97MOB0076	97MITE-10	395217	6905369	15	9.830	1.30	0.070	895	14.8	0.28	---	0.31	7.850	2.75	---	2.9	2.080	6.19	<0.001
97MOB0077	97MITE-10	395217	6905369	15	8.280	0.30	0.065	718	10.6	0.16	---	0.22	6.830	1.95	---	1.5	1.850	4.89	<0.001
97MOB0078	97MITE-10	395217	6905369	15	7.880	<0.05	0.045	271	17.1	0.17	---	0.17	6.550	1.00	---	0.8	1.710	2.08	<0.001
97MOB0079	97MITE-10	395217	6905369	15	18.600	<0.05	0.100	360	31.5	0.21	---	0.32	15.600	1.70	---	1.1	4.130	2.32	<0.001
97MOB0080	97MITE-10	395217	6905369	15	25.300	<0.05	0.100	398	53.3	0.25	---	0.42	20.000	2.10	---	1.6	5.700	2.59	<0.001
97MOB0088	97MITE-I	374031	6900295	15	101.000	<0.05	0.305	470	309.0	0.76	---	2.52	90.500	4.85	---	7.3	24.600	7.18	<0.001
97MOB0089	97MITE-J	375392	6899236	15	77.600	<0.05	0.190	424	35.3	0.36	---	0.64	61.000	38.70	---	2.2	17.000	2.37	0.001

Appendix XVIIIb - Chemical Fractionation in Till (<2 µm)
by ICP-MS, Leach 1 of 3: Sodium Pyrophosphate

Sample	Station ID	Easting	Northing	UTM	Sb ppm	Se ppm	Sm ppm	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm
97MOB0005	97MITE-2	389326	6912075	15	0.020	0.5	1.835	0.20	25.50	0.07	0.205	<0.05	7.37	173	0.135	0.090	0.765	5.10	0.42
97MOB0006	97MITE-2	389326	6912075	15	0.030	1.0	1.245	0.15	30.30	0.06	0.155	<0.05	4.11	165	0.155	0.055	0.460	5.25	0.35
97MOB0007	97MITE-2	389326	6912075	15	0.025	1.0	1.280	0.15	28.00	0.05	0.155	<0.05	4.12	153	0.145	0.060	0.500	4.90	0.42
97MOB0008	97MITE-2	389326	6912075	15	0.030	1.5	1.285	0.20	28.80	0.06	0.155	<0.05	4.33	181	0.170	0.045	0.480	5.35	0.39
97MOB0009	97MITE-2	389326	6912075	15	0.030	1.5	1.485	0.15	24.10	0.05	0.170	<0.05	5.40	155	0.140	0.065	0.585	5.05	0.30
97MOB0010	97MITE-2	389326	6912075	15	0.040	1.0	1.585	0.15	22.70	0.06	0.175	<0.05	5.81	156	0.155	0.060	0.650	5.10	0.29
97MOB0011	97MITE-2	389326	6912075	15	0.015	1.0	1.430	0.15	21.30	0.04	0.150	<0.05	4.61	139	0.140	0.060	0.605	4.50	0.29
97MOB0014	97MITE-A	389500	6911539	15	0.025	1.0	3.390	0.05	11.20	0.04	0.330	<0.05	7.66	150	0.035	0.070	1.670	6.60	0.35
97MOB0015	97MITE-3	390102	6911081	15	0.020	1.0	2.160	0.25	11.55	0.09	0.215	<0.05	7.79	222	0.100	0.060	0.950	5.35	0.40
97MOB0016	97MITE-3	390102	6911081	15	0.015	0.5	2.260	0.20	11.05	0.09	0.220	<0.05	8.59	212	0.095	0.055	1.075	5.10	0.42
97MOB0017	97MITE-3	390102	6911081	15	0.030	1.0	2.230	0.15	9.10	0.07	0.225	<0.05	7.52	158	0.075	0.055	1.005	3.85	0.41
97MOB0018	97MITE-3	390102	6911081	15	<0.005	<0.5	3.390	0.15	7.20	0.08	0.350	<0.05	8.80	147	0.080	0.070	1.265	4.00	0.42
97MOB0019	97MITE-3	390102	6911081	15	<0.005	<0.5	5.770	0.20	6.40	0.10	0.550	<0.05	11.15	225	0.095	0.100	1.595	5.00	0.44
97MOB0038	97MITE-5	391464	6909375	15	<0.005	<0.5	2.530	0.05	11.45	0.05	0.270	<0.05	8.65	102	0.045	0.075	1.275	4.30	0.39
97MOB0066	97MITE-9	394512	6906204	15	<0.005	0.5	10.900	0.30	17.25	0.19	1.045	0.05	17.50	508	0.110	0.210	3.440	14.65	0.49
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
97MOB0068	97MITE-9	394512	6906204	15	<0.005	<0.5	8.770	0.35	3.95	0.19	0.855	<0.05	14.30	399	0.105	0.150	2.620	8.65	0.53
97MOB0069	97MITE-9	394512	6906204	15	<0.005	<0.5	8.100	0.35	3.35	0.19	0.805	<0.05	13.90	412	0.105	0.145	2.560	9.25	0.60
97MOB0070	97MITE-9	394512	6906204	15	<0.005	0.5	8.660	0.30	4.00	0.24	0.850	<0.05	15.30	460	0.105	0.180	3.030	10.15	0.59
97MOB0074	97MITE-10	395217	6905369	15	<0.005	<0.5	1.355	0.05	11.70	0.02	0.155	<0.05	2.78	60	0.065	0.055	0.480	2.60	0.35
97MOB0075	97MITE-10	395217	6905369	15	<0.005	<0.5	1.800	0.05	13.05	0.03	0.210	<0.05	4.33	90	0.090	0.070	0.800	3.45	0.37
97MOB0076	97MITE-10	395217	6905369	15	<0.005	<0.5	1.390	0.05	15.95	0.02	0.160	<0.05	3.01	63	0.085	0.070	0.515	2.60	0.34
97MOB0077	97MITE-10	395217	6905369	15	<0.005	<0.5	1.195	0.05	12.85	0.01	0.130	<0.05	3.07	48	0.065	0.055	0.455	1.90	0.33
97MOB0078	97MITE-10	395217	6905369	15	<0.005	<0.5	1.040	<0.05	6.05	0.01	0.120	<0.05	2.99	36	0.035	0.035	0.435	1.10	0.30
97MOB0079	97MITE-10	395217	6905369	15	<0.005	<0.5	2.460	<0.05	9.95	0.01	0.280	<0.05	5.73	45	0.055	0.085	1.085	2.55	0.33
97MOB0080	97MITE-10	395217	6905369	15	<0.005	<0.5	3.200	0.05	9.60	0.03	0.330	<0.05	8.35	54	0.080	0.095	1.330	5.10	0.32
97MOB0088	97MITE-I	374031	6900295	15	<0.005	<0.5	13.950	0.30	8.90	0.21	1.390	<0.05	21.70	420	0.150	0.330	7.220	14.55	0.56
97MOB0089	97MITE-J	375392	6899236	15	<0.005	<0.5	9.220	0.10	12.15	0.05	0.890	<0.05	11.25	94	0.080	0.195	3.570	3.20	0.48

Appendix XVIIIb - Chemical Fractionation in Till (<2 µm)
by ICP-MS, Leach 1 of 3: Sodium Pyrophosphate

Sample	Station ID	Easting	Northing	UTM	Y ppm	Yb ppm	Zn ppm	Zr ppm
97MOB0005	97MITE-2	389326	6912075	15	6.040	0.590	15.8	37.90
97MOB0006	97MITE-2	389326	6912075	15	4.090	0.380	9.8	13.95
97MOB0007	97MITE-2	389326	6912075	15	4.200	0.390	9.6	14.05
97MOB0008	97MITE-2	389326	6912075	15	4.060	0.380	10.8	13.90
97MOB0009	97MITE-2	389326	6912075	15	5.040	0.385	11.4	18.25
97MOB0010	97MITE-2	389326	6912075	15	5.240	0.485	10.8	18.60
97MOB0011	97MITE-2	389326	6912075	15	4.840	0.400	7.4	14.95
97MOB0014	97MITE-A	389500	6911539	15	6.390	0.475	1.2	14.20
97MOB0015	97MITE-3	390102	6911081	15	4.050	0.380	7.6	16.40
97MOB0016	97MITE-3	390102	6911081	15	4.390	0.380	6.2	16.95
97MOB0017	97MITE-3	390102	6911081	15	4.280	0.355	8.4	14.60
97MOB0018	97MITE-3	390102	6911081	15	5.270	0.475	4.0	15.00
97MOB0019	97MITE-3	390102	6911081	15	9.040	0.665	2.2	17.55
97MOB0038	97MITE-5	391464	6909375	15	5.280	0.500	3.8	17.70
97MOB0066	97MITE-9	394512	6906204	15	16.450	1.340	3.2	17.65
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss
97MOB0068	97MITE-9	394512	6906204	15	11.950	0.955	2.2	15.25
97MOB0069	97MITE-9	394512	6906204	15	11.150	0.935	1.6	14.90
97MOB0070	97MITE-9	394512	6906204	15	12.900	1.125	1.6	17.15
97MOB0074	97MITE-10	395217	6905369	15	4.090	0.350	3.0	8.90
97MOB0075	97MITE-10	395217	6905369	15	4.800	0.470	4.6	13.25
97MOB0076	97MITE-10	395217	6905369	15	4.650	0.475	6.2	9.55
97MOB0077	97MITE-10	395217	6905369	15	3.990	0.365	3.0	7.80
97MOB0078	97MITE-10	395217	6905369	15	3.150	0.255	0.2	5.45
97MOB0079	97MITE-10	395217	6905369	15	6.350	0.580	1.2	10.90
97MOB0080	97MITE-10	395217	6905369	15	7.190	0.630	1.2	14.55
97MOB0088	97MITE-I	374031	6900295	15	26.500	2.140	6.4	37.00
97MOB0089	97MITE-J	375392	6899236	15	16.100	1.285	1.2	13.15

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm)
by ICP-MS, Leach 2 of 3: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Cl ppm
97MOB0005	97MITE-2	389326	6912075	15	0.050	5930	0.7	<0.05	<2	70.40	0.50	0.105	<2	1600	0.04	25.700	---
97MOB0006	97MITE-2	389326	6912075	15	0.040	6850	0.9	<0.05	<2	80.20	0.65	0.120	<2	2150	0.05	33.700	---
97MOB0007	97MITE-2	389326	6912075	15	0.040	9610	1.0	<0.05	12	94.50	1.15	0.225	<2	2680	0.06	44.100	---
97MOB0008	97MITE-2	389326	6912075	15	0.036	8750	1.0	<0.05	2	83.00	0.70	0.170	<2	1950	0.04	41.200	---
97MOB0009	97MITE-2	389326	6912075	15	0.042	8680	1.1	<0.05	<2	82.40	0.45	0.160	<2	1870	0.04	38.500	---
97MOB0010	97MITE-2	389326	6912075	15	0.044	8470	0.9	<0.05	<2	75.70	0.50	0.155	<2	1740	0.03	37.900	---
97MOB0011	97MITE-2	389326	6912075	15	0.044	8070	1.0	<0.05	<2	74.50	0.75	0.200	<2	1540	0.04	39.500	---
97MOB0014	97MITE-A	389500	6911539	15	0.036	4270	0.3	<0.05	<2	46.70	0.15	0.145	<2	380	<0.01	14.950	---
97MOB0015	97MITE-3	390102	6911081	15	0.044	4310	0.6	<0.05	<2	44.00	0.25	0.140	<2	1010	0.02	20.600	---
97MOB0016	97MITE-3	390102	6911081	15	0.046	4170	0.3	<0.05	<2	48.20	0.25	0.140	<2	1140	0.01	21.600	---
97MOB0017	97MITE-3	390102	6911081	15	0.040	4030	0.7	<0.05	<2	41.20	0.20	0.150	<2	1500	0.02	26.300	---
97MOB0018	97MITE-3	390102	6911081	15	0.038	4120	0.7	<0.05	<2	37.90	0.15	0.155	<2	1320	0.01	26.500	---
97MOB0019	97MITE-3	390102	6911081	15	0.054	3620	0.4	<0.05	<2	32.70	0.20	0.130	<2	1510	0.01	33.200	---
97MOB0038	97MITE-5	391464	6909375	15	0.042	5770	0.2	<0.05	<2	64.50	0.30	0.135	<2	1260	0.02	19.750	---
97MOB0066	97MITE-9	394512	6906204	15	0.094	4920	0.7	<0.05	2	56.50	0.35	0.185	<2	1010	0.03	29.900	---
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	---
97MOB0068	97MITE-9	394512	6906204	15	0.050	4230	0.4	<0.05	<2	37.50	0.15	0.115	<2	1400	0.02	36.400	---
97MOB0069	97MITE-9	394512	6906204	15	0.050	4400	0.5	<0.05	<2	41.40	0.20	0.190	<2	1540	0.03	42.900	---
97MOB0070	97MITE-9	394512	6906204	15	0.050	4900	0.5	<0.05	<2	43.30	0.20	0.155	<2	1150	0.03	39.700	---
97MOB0074	97MITE-10	395217	6905369	15	0.054	5940	0.8	<0.05	<2	65.90	0.40	0.095	<2	1540	0.04	20.700	---
97MOB0075	97MITE-10	395217	6905369	15	0.056	6080	0.7	<0.05	<2	63.00	0.60	0.095	<2	1300	0.03	18.900	---
97MOB0076	97MITE-10	395217	6905369	15	0.052	8460	0.8	<0.05	2	79.50	0.70	0.125	<2	1510	0.04	22.400	---
97MOB0077	97MITE-10	395217	6905369	15	0.044	7510	0.8	<0.05	<2	63.40	0.80	0.115	<2	1590	0.04	23.800	---
97MOB0078	97MITE-10	395217	6905369	15	0.032	3040	0.6	<0.05	<2	25.80	0.15	0.070	<2	870	0.01	14.000	---
97MOB0079	97MITE-10	395217	6905369	15	0.062	5780	0.8	<0.05	<2	61.50	0.25	0.200	<2	1630	0.04	29.500	---
97MOB0080	97MITE-10	395217	6905369	15	0.076	6280	0.8	<0.05	<2	68.80	0.35	0.265	<2	1720	0.04	32.700	---
97MOB0088	97MITE-I	374031	6900295	15	0.082	5700	0.5	<0.05	<2	65.80	0.35	0.160	<2	510	0.03	39.300	---
97MOB0089	97MITE-J	375392	6899236	15	0.058	7180	0.8	<0.05	<2	74.60	0.40	0.210	<2	1710	0.05	64.700	---

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm) by ICP-MS, Leach 2 of 3: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Co ppm	Cr ppm	Cs ppm	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm
97MOB0005	97MITE-2	389326	6912075	15	2.85	9.10	0.395	27.80	1.320	0.615	0.405	6580	1.30	2.070	<0.1	0.01
97MOB0006	97MITE-2	389326	6912075	15	2.80	8.55	0.355	32.00	1.900	0.940	0.575	7140	1.20	3.020	<0.1	0.01
97MOB0007	97MITE-2	389326	6912075	15	3.85	16.35	0.815	39.90	2.190	0.965	0.645	11000	2.65	3.370	<0.1	0.02
97MOB0008	97MITE-2	389326	6912075	15	3.50	13.40	0.810	32.50	1.900	0.955	0.610	9870	2.30	3.170	<0.1	0.01
97MOB0009	97MITE-2	389326	6912075	15	3.80	13.25	0.835	33.00	1.765	0.820	0.560	10200	2.30	2.870	<0.1	0.01
97MOB0010	97MITE-2	389326	6912075	15	3.75	13.90	0.890	29.80	1.630	0.765	0.545	10090	2.50	2.670	<0.1	0.01
97MOB0011	97MITE-2	389326	6912075	15	4.10	14.05	0.865	26.40	1.620	0.750	0.530	9770	2.30	2.680	<0.1	0.03
97MOB0014	97MITE-A	389500	6911539	15	2.70	6.50	0.245	9.35	0.355	0.155	0.125	3050	1.35	0.560	<0.1	0.01
97MOB0015	97MITE-3	390102	6911081	15	7.25	6.95	0.660	10.65	0.475	0.220	0.160	3150	1.20	0.815	<0.1	<0.01
97MOB0016	97MITE-3	390102	6911081	15	6.85	6.15	0.450	11.25	0.560	0.235	0.185	2860	1.00	0.960	<0.1	<0.01
97MOB0017	97MITE-3	390102	6911081	15	5.80	6.05	0.450	11.90	0.705	0.305	0.220	2830	1.05	1.195	<0.1	<0.01
97MOB0018	97MITE-3	390102	6911081	15	5.70	6.35	0.540	12.60	0.670	0.295	0.215	3140	1.30	1.090	<0.1	<0.01
97MOB0019	97MITE-3	390102	6911081	15	4.90	5.20	0.345	13.35	0.820	0.380	0.270	2520	0.95	1.440	<0.1	<0.01
97MOB0038	97MITE-5	391464	6909375	15	2.85	10.10	0.315	9.80	0.695	0.330	0.225	3910	1.25	1.240	<0.1	<0.01
97MOB0066	97MITE-9	394512	6906204	15	4.80	8.45	0.840	10.10	0.705	0.295	0.245	3730	1.65	1.300	<0.1	<0.01
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
97MOB0068	97MITE-9	394512	6906204	15	3.70	6.25	0.390	10.10	0.965	0.390	0.315	2530	1.15	1.755	<0.1	<0.01
97MOB0069	97MITE-9	394512	6906204	15	3.60	6.45	0.455	9.25	1.085	0.455	0.390	2770	1.10	2.140	<0.1	0.01
97MOB0070	97MITE-9	394512	6906204	15	3.80	7.60	0.520	10.05	1.010	0.390	0.335	2870	1.25	1.850	<0.1	<0.01
97MOB0074	97MITE-10	395217	6905369	15	3.65	8.65	0.270	34.50	1.090	0.515	0.350	6260	1.10	1.750	<0.1	<0.01
97MOB0075	97MITE-10	395217	6905369	15	3.40	9.10	0.310	31.10	0.910	0.425	0.275	6760	1.00	1.515	<0.1	0.01
97MOB0076	97MITE-10	395217	6905369	15	4.40	13.35	0.435	44.60	1.270	0.610	0.405	9900	1.65	2.080	<0.1	<0.01
97MOB0077	97MITE-10	395217	6905369	15	3.85	11.75	0.460	35.60	1.200	0.590	0.395	9260	1.55	2.030	<0.1	0.01
97MOB0078	97MITE-10	395217	6905369	15	2.25	5.75	0.320	13.60	0.585	0.290	0.190	2790	0.80	1.035	<0.1	<0.01
97MOB0079	97MITE-10	395217	6905369	15	4.20	10.65	0.520	24.80	1.180	0.525	0.380	7560	1.50	2.010	<0.1	0.01
97MOB0080	97MITE-10	395217	6905369	15	5.30	13.10	0.535	24.40	1.045	0.485	0.350	8980	1.60	1.870	<0.1	0.01
97MOB0088	97MITE-I	374031	6900295	15	12.55	10.25	0.680	32.80	0.880	0.365	0.325	7070	1.25	1.710	<0.1	<0.01
97MOB0089	97MITE-J	375392	6899236	15	10.50	11.75	0.645	31.90	1.645	0.690	0.560	6720	1.65	2.990	0.1	<0.01

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm)
by ICP-MS, Leach 2 of 3: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Hg ppm	Ho ppm	I ppm	In ppm	K ppm	La ppm	Li ppm	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm
97MOB0005	97MITE-2	389326	6912075	15	<0.1	0.195	0.2	0.005	1355	17.550	10.15	0.065	2260	74.0	0.01	---	0.05
97MOB0006	97MITE-2	389326	6912075	15	<0.1	0.310	0.1	0.005	1420	22.900	10.10	0.105	2210	74.5	0.01	---	0.05
97MOB0007	97MITE-2	389326	6912075	15	<0.1	0.330	0.6	0.005	2260	29.200	20.00	0.115	4720	139.5	0.01	---	0.07
97MOB0008	97MITE-2	389326	6912075	15	<0.1	0.315	0.2	0.005	2080	28.200	13.25	0.100	3060	118.5	0.01	---	0.06
97MOB0009	97MITE-2	389326	6912075	15	<0.1	0.270	0.1	0.005	1970	25.100	13.25	0.095	3170	115.0	0.01	---	0.05
97MOB0010	97MITE-2	389326	6912075	15	<0.1	0.255	0.1	0.005	1915	24.700	13.00	0.080	3160	117.0	<0.01	---	0.05
97MOB0011	97MITE-2	389326	6912075	15	<0.1	0.235	0.1	0.005	1860	24.200	12.25	0.080	3020	129.5	0.01	---	0.06
97MOB0014	97MITE-A	389500	6911539	15	<0.1	0.045	0.3	<0.005	620	6.840	5.20	0.005	1115	48.9	0.02	---	0.09
97MOB0015	97MITE-3	390102	6911081	15	<0.1	0.075	0.3	<0.005	515	6.960	6.85	0.020	1410	184.0	0.03	---	0.10
97MOB0016	97MITE-3	390102	6911081	15	<0.1	0.085	0.3	<0.005	430	8.180	6.20	0.020	1235	165.0	0.04	---	0.11
97MOB0017	97MITE-3	390102	6911081	15	<0.1	0.110	0.3	<0.005	455	10.300	6.05	0.030	1195	152.5	0.03	---	0.10
97MOB0018	97MITE-3	390102	6911081	15	<0.1	0.095	0.1	<0.005	485	10.200	5.60	0.025	1225	150.0	0.04	---	0.09
97MOB0019	97MITE-3	390102	6911081	15	<0.1	0.120	0.2	<0.005	340	15.000	4.15	0.030	909	123.0	0.05	---	0.11
97MOB0038	97MITE-5	391464	6909375	15	<0.1	0.110	0.3	<0.005	770	10.350	7.15	0.030	1820	73.2	0.01	---	0.05
97MOB0066	97MITE-9	394512	6906204	15	<0.1	0.100	0.7	<0.005	425	15.150	12.70	0.020	1635	76.4	0.03	---	0.12
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	---	not/ss
97MOB0068	97MITE-9	394512	6906204	15	<0.1	0.145	0.4	<0.005	230	17.600	6.65	0.025	1145	74.2	0.02	---	0.11
97MOB0069	97MITE-9	394512	6906204	15	<0.1	0.160	0.8	<0.005	240	20.200	5.60	0.035	1105	74.7	0.03	---	0.13
97MOB0070	97MITE-9	394512	6906204	15	<0.1	0.140	0.9	<0.005	245	18.800	6.85	0.030	1365	83.0	0.03	---	0.13
97MOB0074	97MITE-10	395217	6905369	15	<0.1	0.180	0.3	0.005	1040	13.450	8.80	0.065	1890	82.7	0.02	---	0.04
97MOB0075	97MITE-10	395217	6905369	15	<0.1	0.150	0.3	<0.005	1075	12.400	7.65	0.050	1945	82.6	0.01	---	0.05
97MOB0076	97MITE-10	395217	6905369	15	<0.1	0.205	0.2	0.005	1550	17.300	11.20	0.075	2830	129.0	0.01	---	0.05
97MOB0077	97MITE-10	395217	6905369	15	<0.1	0.200	0.2	0.005	1365	16.950	9.80	0.065	2530	110.0	0.01	---	0.04
97MOB0078	97MITE-10	395217	6905369	15	<0.1	0.095	0.1	<0.005	590	8.810	4.40	0.030	1145	52.7	0.01	---	0.05
97MOB0079	97MITE-10	395217	6905369	15	<0.1	0.190	0.3	0.005	995	17.700	7.55	0.055	1925	87.1	0.04	---	0.06
97MOB0080	97MITE-10	395217	6905369	15	<0.1	0.165	0.3	<0.005	1010	17.100	8.90	0.050	2090	89.2	0.01	---	0.07
97MOB0088	97MITE-I	374031	6900295	15	<0.1	0.125	1.0	<0.005	500	21.400	8.45	0.025	1655	462.0	0.04	---	0.08
97MOB0089	97MITE-J	375392	6899236	15	<0.1	0.230	1.1	0.005	645	28.200	8.80	0.055	1955	345.0	0.04	---	0.09

Appendix XVIIIb: Chemical Fractionation in Till (<2 μm)
by ICP-MS, Leach 2 of 3: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Nd ppm	Ni ppm	P ppm	Pb ppm	Pr ppm	Rb ppm	Re ppm	Sb ppm	Se ppm	Sm ppm	Sn ppm	Sr ppm	Ta ppm
97MOB0005	97MITE-2	389326	6912075	15	14.350	12.95	---	11.3	3.940	7.47	0.001	<0.005	<0.5	2.380	<0.05	15.45	<0.01
97MOB0006	97MITE-2	389326	6912075	15	20.000	12.40	---	12.9	5.520	7.03	<0.001	<0.005	<0.5	3.320	<0.05	19.95	<0.01
97MOB0007	97MITE-2	389326	6912075	15	24.000	25.00	---	18.0	6.620	15.40	<0.001	<0.005	<0.5	3.820	<0.05	22.10	<0.01
97MOB0008	97MITE-2	389326	6912075	15	22.600	16.00	---	13.3	6.310	14.35	<0.001	<0.005	<0.5	3.600	<0.05	19.00	<0.01
97MOB0009	97MITE-2	389326	6912075	15	20.600	14.80	---	12.9	5.900	14.30	<0.001	<0.005	<0.5	3.380	<0.05	17.20	<0.01
97MOB0010	97MITE-2	389326	6912075	15	20.300	14.90	---	12.5	5.750	14.90	<0.001	<0.005	<0.5	3.220	<0.05	16.35	<0.01
97MOB0011	97MITE-2	389326	6912075	15	19.550	15.20	---	12.5	5.480	15.40	<0.001	<0.005	<0.5	3.080	<0.05	15.75	<0.01
97MOB0014	97MITE-A	389500	6911539	15	4.830	6.55	---	7.0	1.350	5.36	<0.001	<0.005	<0.5	0.700	<0.05	4.20	<0.01
97MOB0015	97MITE-3	390102	6911081	15	6.000	6.95	---	11.6	1.585	7.91	<0.001	<0.005	<0.5	1.005	<0.05	9.75	0.01
97MOB0016	97MITE-3	390102	6911081	15	6.860	6.35	---	12.3	1.930	6.26	<0.001	0.020	<0.5	1.110	<0.05	10.35	<0.01
97MOB0017	97MITE-3	390102	6911081	15	8.550	6.05	---	12.3	2.340	6.29	<0.001	<0.005	<0.5	1.410	<0.05	12.95	<0.01
97MOB0018	97MITE-3	390102	6911081	15	8.310	6.45	---	12.0	2.280	7.50	<0.001	<0.005	<0.5	1.290	<0.05	11.55	<0.01
97MOB0019	97MITE-3	390102	6911081	15	10.800	5.45	---	10.8	3.090	5.54	<0.001	<0.005	<0.5	1.585	<0.05	13.70	<0.01
97MOB0038	97MITE-5	391464	6909375	15	8.450	8.25	---	10.2	2.330	7.60	<0.001	<0.005	<0.5	1.355	<0.05	11.15	<0.01
97MOB0066	97MITE-9	394512	6906204	15	10.450	8.05	---	9.7	3.000	9.18	<0.001	0.015	<0.5	1.490	<0.05	10.85	0.01
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	---	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
97MOB0068	97MITE-9	394512	6906204	15	13.400	5.10	---	8.7	3.800	4.96	<0.001	<0.005	<0.5	2.040	<0.05	12.35	<0.01
97MOB0069	97MITE-9	394512	6906204	15	15.650	5.15	---	11.4	4.340	4.75	<0.001	0.005	<0.5	2.380	<0.05	9.90	<0.01
97MOB0070	97MITE-9	394512	6906204	15	14.500	6.15	---	10.1	4.010	5.31	<0.001	<0.005	<0.5	2.160	<0.05	7.30	0.01
97MOB0074	97MITE-10	395217	6905369	15	11.800	13.90	---	10.7	3.060	5.52	<0.001	<0.005	<0.5	1.960	<0.05	11.25	<0.01
97MOB0075	97MITE-10	395217	6905369	15	10.200	12.55	---	9.9	2.770	5.84	<0.001	<0.005	<0.5	1.665	<0.05	9.40	<0.01
97MOB0076	97MITE-10	395217	6905369	15	14.200	16.75	---	12.2	3.870	8.82	<0.001	<0.005	<0.5	2.330	<0.05	11.50	<0.01
97MOB0077	97MITE-10	395217	6905369	15	14.150	14.30	---	11.3	3.750	8.55	<0.001	<0.005	<0.5	2.320	<0.05	11.45	<0.01
97MOB0078	97MITE-10	395217	6905369	15	7.140	6.75	---	6.5	1.960	5.25	<0.001	<0.005	<0.5	1.145	<0.05	6.80	<0.01
97MOB0079	97MITE-10	395217	6905369	15	14.250	11.55	---	12.4	3.820	8.05	<0.001	<0.005	<0.5	2.350	<0.05	12.10	<0.01
97MOB0080	97MITE-10	395217	6905369	15	13.600	12.85	---	14.4	3.720	8.69	<0.001	0.005	<0.5	2.130	<0.05	12.20	<0.01
97MOB0088	97MITE-I	374031	6900295	15	14.700	9.55	---	10.4	4.260	8.91	<0.001	<0.005	<0.5	1.990	<0.05	3.90	<0.01
97MOB0089	97MITE-J	375392	6899236	15	22.800	14.15	---	16.6	6.230	8.69	<0.001	<0.005	<0.5	3.350	<0.05	13.15	0.01

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm)
by ICP-MS, Leach 2 of 3: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Tb ppm	Te ppm	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
97MOB0005	97MITE-2	389326	6912075	15	0.270	<0.05	0.93	20	0.085	0.070	0.320	7.35	0.01	5.770	0.445	27.4	0.20
97MOB0006	97MITE-2	389326	6912075	15	0.395	<0.05	0.70	19	0.065	0.110	0.520	7.10	0.01	8.730	0.725	29.4	0.25
97MOB0007	97MITE-2	389326	6912075	15	0.440	<0.05	0.87	36	0.190	0.125	0.745	12.00	0.01	9.840	0.775	61.0	0.50
97MOB0008	97MITE-2	389326	6912075	15	0.385	<0.05	0.79	32	0.170	0.110	0.630	10.40	0.01	8.590	0.715	34.8	0.25
97MOB0009	97MITE-2	389326	6912075	15	0.360	<0.05	0.73	30	0.165	0.095	0.540	10.65	0.01	7.730	0.635	34.4	0.30
97MOB0010	97MITE-2	389326	6912075	15	0.345	<0.05	0.69	27	0.180	0.090	0.530	10.75	<0.01	7.150	0.585	33.0	0.25
97MOB0011	97MITE-2	389326	6912075	15	0.330	<0.05	0.64	33	0.160	0.095	0.510	9.90	0.01	7.300	0.570	31.6	0.35
97MOB0014	97MITE-A	389500	6911539	15	0.070	<0.05	0.18	28	0.040	0.015	0.150	6.50	0.01	1.190	0.085	10.0	0.60
97MOB0015	97MITE-3	390102	6911081	15	0.105	<0.05	0.10	33	0.070	0.025	0.155	6.90	<0.01	1.995	0.135	16.4	0.10
97MOB0016	97MITE-3	390102	6911081	15	0.125	<0.05	0.17	25	0.050	0.025	0.160	6.10	0.01	2.390	0.160	14.4	0.15
97MOB0017	97MITE-3	390102	6911081	15	0.160	<0.05	0.18	26	0.055	0.030	0.215	5.65	<0.01	3.020	0.215	12.8	0.15
97MOB0018	97MITE-3	390102	6911081	15	0.140	<0.05	0.13	31	0.065	0.030	0.220	6.05	<0.01	2.860	0.170	13.4	0.15
97MOB0019	97MITE-3	390102	6911081	15	0.190	<0.05	0.14	28	0.055	0.035	0.215	5.40	<0.01	3.770	0.225	10.6	0.15
97MOB0038	97MITE-5	391464	6909375	15	0.150	<0.05	0.11	18	0.025	0.035	0.195	8.50	<0.01	3.430	0.190	23.6	0.20
97MOB0066	97MITE-9	394512	6906204	15	0.150	<0.05	0.08	25	0.065	0.025	0.190	9.45	<0.01	2.840	0.160	17.8	0.15
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
97MOB0068	97MITE-9	394512	6906204	15	0.220	<0.05	0.10	22	0.035	0.040	0.195	6.70	<0.01	3.950	0.220	11.0	1.35
97MOB0069	97MITE-9	394512	6906204	15	0.255	<0.05	0.10	27	0.090	0.045	0.260	7.15	0.01	4.080	0.255	10.6	0.30
97MOB0070	97MITE-9	394512	6906204	15	0.220	<0.05	0.09	26	0.065	0.035	0.200	7.45	<0.01	3.360	0.185	12.8	0.20
97MOB0074	97MITE-10	395217	6905369	15	0.225	<0.05	0.31	22	0.055	0.055	0.290	6.55	<0.01	4.940	0.395	26.4	0.20
97MOB0075	97MITE-10	395217	6905369	15	0.200	<0.05	0.34	21	0.075	0.045	0.270	6.80	<0.01	3.900	0.290	25.2	0.20
97MOB0076	97MITE-10	395217	6905369	15	0.260	<0.05	0.47	25	0.110	0.075	0.385	9.50	<0.01	6.000	0.435	37.2	0.30
97MOB0077	97MITE-10	395217	6905369	15	0.260	<0.05	0.39	22	0.105	0.065	0.390	8.05	<0.01	5.450	0.445	31.2	0.20
97MOB0078	97MITE-10	395217	6905369	15	0.125	<0.05	0.26	24	0.050	0.035	0.210	4.25	<0.01	2.700	0.195	13.4	0.10
97MOB0079	97MITE-10	395217	6905369	15	0.255	<0.05	0.30	26	0.105	0.060	0.415	8.70	0.01	4.830	0.380	23.2	0.20
97MOB0080	97MITE-10	395217	6905369	15	0.235	<0.05	0.21	23	0.110	0.055	0.330	11.85	<0.01	4.570	0.355	25.6	0.30
97MOB0088	97MITE-I	374031	6900295	15	0.200	<0.05	0.09	25	0.110	0.030	0.275	10.20	<0.01	3.090	0.170	19.0	0.15
97MOB0089	97MITE-J	375392	6899236	15	0.355	<0.05	0.16	30	0.105	0.065	0.510	10.05	0.01	6.470	0.405	18.8	0.15

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm fraction)
by ICP-MS/ICP-AES, Leach 3 of 3: Aqua Regia

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm
97MOB0005	97MITE-2	389326	6912075	15	0.06	3.22	3.4	150	1.5	0.52	0.43	<0.1	11	70	25.8
97MOB0006	97MITE-2	389326	6912075	15	0.06	3.19	3.4	150	1.0	0.54	0.45	<0.1	10	67	25.8
97MOB0007	97MITE-2	389326	6912075	15	0.06	3.04	3.2	140	1.0	0.46	0.45	<0.1	10	63	22.0
97MOB0008	97MITE-2	389326	6912075	15	0.06	2.57	2.6	120	1.0	0.38	0.43	<0.1	8	55	18.2
97MOB0009	97MITE-2	389326	6912075	15	0.08	2.93	3.0	140	1.0	0.44	0.51	<0.1	10	65	19.4
97MOB0010	97MITE-2	389326	6912075	15	0.08	2.64	2.8	130	1.0	0.40	0.52	<0.1	9	59	17.0
97MOB0011	97MITE-2	389326	6912075	15	0.08	2.55	2.6	120	1.0	0.40	0.47	<0.1	9	59	16.4
97MOB0014	97MITE-A	389500	6911539	15	0.06	1.58	1.4	60	<0.5	0.18	0.20	<0.1	5	40	8.4
97MOB0015	97MITE-3	390102	6911081	15	0.14	1.30	3.0	60	0.5	0.42	0.42	<0.1	7	41	10.4
97MOB0016	97MITE-3	390102	6911081	15	0.14	1.43	2.8	60	0.5	0.44	0.47	<0.1	8	42	11.2
97MOB0017	97MITE-3	390102	6911081	15	0.14	1.35	2.8	50	0.5	0.46	0.54	<0.1	7	43	10.0
97MOB0018	97MITE-3	390102	6911081	15	0.16	1.31	2.4	60	0.5	0.46	0.53	<0.1	7	41	11.2
97MOB0019	97MITE-3	390102	6911081	15	0.18	1.22	2.4	50	0.5	0.46	0.54	<0.1	6	45	11.2
97MOB0038	97MITE-5	391464	6909375	15	0.12	2.65	2.4	100	0.5	0.46	0.44	<0.1	9	62	12.8
97MOB0066	97MITE-9	394512	6906204	15	0.16	1.27	3.2	50	0.5	0.34	0.37	<0.1	7	40	8.0
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
97MOB0068	97MITE-9	394512	6906204	15	0.20	1.21	3.4	40	0.5	0.42	0.48	<0.1	8	47	9.0
97MOB0069	97MITE-9	394512	6906204	15	0.20	1.23	3.4	40	0.5	0.42	0.51	<0.1	8	53	8.4
97MOB0070	97MITE-9	394512	6906204	15	0.20	1.43	4.0	50	0.5	0.50	0.51	<0.1	9	52	10.2
97MOB0074	97MITE-10	395217	6905369	15	0.08	2.89	3.2	140	0.5	0.50	0.51	<0.1	12	73	33.0
97MOB0075	97MITE-10	395217	6905369	15	0.10	3.19	3.4	150	1.0	0.52	0.54	<0.1	12	78	37.2
97MOB0076	97MITE-10	395217	6905369	15	0.08	3.40	3.2	170	1.0	0.48	0.49	<0.1	13	82	38.4
97MOB0077	97MITE-10	395217	6905369	15	0.06	2.79	2.4	130	0.5	0.36	0.49	<0.1	11	70	27.4
97MOB0078	97MITE-10	395217	6905369	15	0.10	1.25	1.8	60	0.5	0.30	0.54	<0.1	6	39	11.4
97MOB0079	97MITE-10	395217	6905369	15	0.14	1.90	2.8	90	0.5	0.52	0.57	<0.1	9	60	18.6
97MOB0080	97MITE-10	395217	6905369	15	0.12	2.10	2.8	90	0.5	0.46	0.57	<0.1	10	67	17.8
97MOB0088	97MITE-I	374031	6900295	15	0.18	2.26	3.8	100	0.5	0.54	0.47	<0.1	16	77	42.2
97MOB0089	97MITE-J	375392	6899236	15	0.18	2.30	3.8	80	0.5	0.74	0.67	<0.1	13	80	40.8

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm fraction) by ICP-MS/ICP-AES, Leach 3 of 3: Aqua Regia

Sample	Station ID	Easting	Northing	UTM	Fe %	Ga ppm	Ge ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm
97MOB0005	97MITE-2	389326	6912075	15	3.32	14.4	0.3	<0.01	0.88	50	1.42	370	0.4	---	28	---	12
97MOB0006	97MITE-2	389326	6912075	15	3.29	15.1	0.3	<0.01	0.86	60	1.42	360	0.4	---	28	---	12
97MOB0007	97MITE-2	389326	6912075	15	3.07	13.1	0.3	<0.01	0.81	50	1.30	335	0.4	---	26	---	12
97MOB0008	97MITE-2	389326	6912075	15	2.63	11.0	0.2	<0.01	0.68	40	1.15	300	0.2	---	23	---	10
97MOB0009	97MITE-2	389326	6912075	15	3.12	12.0	0.3	<0.01	0.77	50	1.31	355	0.4	---	26	---	12
97MOB0010	97MITE-2	389326	6912075	15	2.93	10.7	0.2	<0.01	0.68	50	1.20	330	0.6	---	24	---	8
97MOB0011	97MITE-2	389326	6912075	15	2.98	10.4	0.3	<0.01	0.64	50	1.17	330	0.6	---	23	---	10
97MOB0014	97MITE-A	389500	6911539	15	1.35	5.1	0.1	<0.01	0.47	10	0.47	125	0.2	---	15	---	6
97MOB0015	97MITE-3	390102	6911081	15	2.48	6.4	0.2	<0.01	0.27	20	0.61	250	0.6	---	14	---	10
97MOB0016	97MITE-3	390102	6911081	15	2.61	6.7	0.2	<0.01	0.28	30	0.67	275	0.6	---	15	---	10
97MOB0017	97MITE-3	390102	6911081	15	3.08	6.5	0.2	<0.01	0.26	30	0.63	270	0.6	---	14	---	14
97MOB0018	97MITE-3	390102	6911081	15	2.92	6.1	0.3	<0.01	0.24	30	0.60	275	0.6	---	13	---	12
97MOB0019	97MITE-3	390102	6911081	15	3.32	5.7	0.3	<0.01	0.22	40	0.54	270	0.8	---	12	---	14
97MOB0038	97MITE-5	391464	6909375	15	3.18	10.8	0.3	<0.01	0.58	30	1.08	335	0.6	---	23	---	12
97MOB0066	97MITE-9	394512	6906204	15	2.29	6.1	0.1	<0.01	0.22	30	0.61	245	1.0	---	13	---	8
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	---	not/ss	---	not/ss
97MOB0068	97MITE-9	394512	6906204	15	3.22	6.4	0.3	0.01	0.18	40	0.61	285	0.8	---	13	---	12
97MOB0069	97MITE-9	394512	6906204	15	3.46	6.3	0.3	<0.01	0.18	40	0.61	285	1.0	---	14	---	12
97MOB0070	97MITE-9	394512	6906204	15	3.46	7.1	0.3	0.02	0.20	40	0.68	305	1.0	---	14	---	14
97MOB0074	97MITE-10	395217	6905369	15	3.65	11.7	0.3	<0.01	0.72	50	1.38	380	0.8	---	32	---	10
97MOB0075	97MITE-10	395217	6905369	15	3.81	12.6	0.3	<0.01	0.79	50	1.50	405	0.8	---	34	---	14
97MOB0076	97MITE-10	395217	6905369	15	3.75	13.9	0.3	<0.01	0.89	50	1.64	410	0.6	---	36	---	12
97MOB0077	97MITE-10	395217	6905369	15	3.28	11.2	0.3	<0.01	0.71	40	1.42	375	0.4	---	30	---	8
97MOB0078	97MITE-10	395217	6905369	15	2.25	5.6	0.2	<0.01	0.27	40	0.67	225	0.4	---	14	---	8
97MOB0079	97MITE-10	395217	6905369	15	3.92	8.4	0.3	<0.01	0.42	50	0.97	325	0.8	---	21	---	14
97MOB0080	97MITE-10	395217	6905369	15	3.75	9.2	0.3	<0.01	0.46	40	1.10	355	0.8	---	23	---	10
97MOB0088	97MITE-I	374031	6900295	15	3.74	9.1	0.3	<0.01	0.39	40	1.00	575	1.2	---	26	---	16
97MOB0089	97MITE-J	375392	6899236	15	4.51	9.3	0.4	<0.01	0.36	60	1.00	425	1.0	---	32	---	18

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm fraction)
by ICP-MS/ICP-AES, Leach 3 of 3: Aqua Regia

Sample	Station ID	Easting	Northing	UTM	Sb ppm	Sc ppm	Sr ppm	Te ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0005	97MITE-2	389326	6912075	15	0.2	7	99	<0.1	0.17	1.0	2.05	46	0.70	74
97MOB0006	97MITE-2	389326	6912075	15	0.1	7	108	<0.1	0.17	0.9	2.25	45	0.65	74
97MOB0007	97MITE-2	389326	6912075	15	0.1	7	107	<0.1	0.17	0.8	1.90	43	0.65	68
97MOB0008	97MITE-2	389326	6912075	15	0.1	7	98	<0.1	0.15	0.8	1.65	39	0.55	58
97MOB0009	97MITE-2	389326	6912075	15	0.1	8	112	<0.1	0.19	0.9	1.75	46	0.65	68
97MOB0010	97MITE-2	389326	6912075	15	0.1	7	111	<0.1	0.18	0.8	1.65	43	0.65	62
97MOB0011	97MITE-2	389326	6912075	15	0.1	7	99	<0.1	0.18	0.7	1.60	43	0.65	62
97MOB0014	97MITE-A	389500	6911539	15	<0.1	4	40	<0.1	0.09	0.3	1.10	25	0.45	22
97MOB0015	97MITE-3	390102	6911081	15	0.1	4	72	<0.1	0.15	0.3	1.15	36	0.90	34
97MOB0016	97MITE-3	390102	6911081	15	0.1	4	82	<0.1	0.16	0.3	1.25	39	0.85	38
97MOB0017	97MITE-3	390102	6911081	15	0.1	5	90	<0.1	0.18	0.3	1.45	42	1.15	36
97MOB0018	97MITE-3	390102	6911081	15	0.2	5	91	<0.1	0.17	0.3	1.45	41	1.15	34
97MOB0019	97MITE-3	390102	6911081	15	0.2	5	92	<0.1	0.19	0.3	1.55	45	1.35	30
97MOB0038	97MITE-5	391464	6909375	15	0.1	6	89	<0.1	0.18	0.5	1.40	45	0.75	62
97MOB0066	97MITE-9	394512	6906204	15	0.1	4	68	<0.1	0.15	0.3	1.20	37	0.70	34
97MOB0067	97MITE-9	394512	6906204	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
97MOB0068	97MITE-9	394512	6906204	15	0.2	4	85	<0.1	0.19	0.3	1.55	45	1.30	34
97MOB0069	97MITE-9	394512	6906204	15	0.3	5	89	<0.1	0.20	0.3	1.60	47	1.35	34
97MOB0070	97MITE-9	394512	6906204	15	0.2	5	93	<0.1	0.20	0.3	1.70	50	1.30	38
97MOB0074	97MITE-10	395217	6905369	15	0.1	8	93	<0.1	0.20	0.9	1.65	52	0.85	76
97MOB0075	97MITE-10	395217	6905369	15	0.1	8	96	<0.1	0.20	1.0	1.70	54	0.80	82
97MOB0076	97MITE-10	395217	6905369	15	0.1	9	100	<0.1	0.20	1.1	1.70	54	0.75	88
97MOB0077	97MITE-10	395217	6905369	15	0.1	7	93	<0.1	0.19	0.9	1.45	46	0.60	74
97MOB0078	97MITE-10	395217	6905369	15	0.1	4	81	<0.1	0.15	0.3	1.30	33	0.75	36
97MOB0079	97MITE-10	395217	6905369	15	0.2	6	96	<0.1	0.21	0.6	1.85	51	1.30	54
97MOB0080	97MITE-10	395217	6905369	15	0.1	7	94	<0.1	0.21	0.7	1.60	53	1.10	60
97MOB0088	97MITE-I	374031	6900295	15	0.1	6	71	<0.1	0.18	0.7	1.75	56	0.75	58
97MOB0089	97MITE-J	375392	6899236	15	0.3	7	98	<0.1	0.25	0.5	2.85	63	1.50	54

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm fraction) by ICP-MS, Hot Hydroxylamine Hydrochloride (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm
99MOB2007	MOB990167	402005	6914817	15	0.188	8710	1.8	<0.10	<4	159.50	0.90	0.360	4	4810	0.20	79.500	5.30	13.30	0.700
99MOB2008	MOB990167	402005	6914817	15	0.072	5850	2.4	<0.10	<4	55.20	0.50	0.360	8	1290	0.16	61.100	4.05	18.30	0.740
99MOB2009	MOB990167	402005	6914817	15	0.122	5030	1.9	<0.05	<2	69.90	0.55	0.270	8	1730	0.17	39.400	3.90	14.65	0.475
99MOB2010	MOB990167	402005	6914817	15	0.122	6320	2.0	<0.05	<2	106.50	0.60	0.395	12	1790	0.16	60.100	4.80	15.75	0.490
99MOB2011	MOB990167	402005	6914817	15	0.118	6350	2.4	<0.05	<2	85.30	0.70	0.400	10	1500	0.14	61.000	5.00	15.90	0.490
99MOB2012	MOB990167	402005	6914817	15	0.086	4650	2.3	<0.05	<2	48.90	0.40	0.365	2	1560	0.14	24.800	4.20	13.05	0.425
99MOB2029	MOB990175	349732	6884943	15	0.194	11170	2.8	<0.20	<8	69.80	1.00	0.820	16	2080	0.16	104.000	22.00	20.60	2.180
99MOB2030	MOB990175	349732	6884943	15	0.214	10720	2.8	<0.20	<8	69.00	0.80	0.880	16	2180	0.12	107.500	21.60	20.60	2.080
99MOB2031	MOB990175	349732	6884943	15	0.150	8510	2.4	<0.20	<8	60.00	0.40	0.900	<8	2190	0.16	83.800	13.80	17.60	1.620
99MOB2032	MOB990175	349732	6884943	15	0.206	11770	3.2	<0.20	<8	68.40	1.00	0.840	8	1720	0.16	95.300	12.20	22.00	1.800
99MOB2033	MOB990175	349732	6884943	15	0.118	8250	1.5	<0.05	<2	58.30	0.80	0.525	14	1800	0.23	70.400	11.25	17.00	0.975
99MOB2048	MOB990182	421700	6935690	15	0.144	6940	1.8	<0.05	<2	97.40	0.50	0.935	6	1960	0.18	69.000	11.25	15.95	1.660
99MOB2049	MOB990182	421700	6935690	15	0.110	8530	3.2	<0.20	<8	117.50	0.40	0.580	8	2020	0.20	93.000	16.60	20.20	2.580
99MOB2050	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2051	MOB990182	421700	6935690	15	0.080	8480	3.2	<0.20	<8	167.00	0.40	0.560	8	2120	0.28	89.800	16.20	22.60	2.600
99MOB2052	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2053	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2054	MOB990182	421700	6935690	15	0.166	7530	1.5	<0.05	<2	160.50	0.65	0.460	12	2170	0.25	110.500	10.65	18.80	0.805

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm fraction) by ICP-MS, Hot Hydroxylamine Hydrochloride (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm	Ho ppm	I ppm	In ppm	K ppm	La ppm
99MOB2007	MOB990167	402005	6914817	15	36.00	1.830	0.820	0.650	7980	1.90	3.400	<0.2	0.06	0.270	17.0	0.010	1690	41.300
99MOB2008	MOB990167	402005	6914817	15	19.20	1.695	0.750	0.590	11390	1.60	2.710	<0.2	0.04	0.260	10.6	<0.010	975	26.200
99MOB2009	MOB990167	402005	6914817	15	16.20	1.040	0.510	0.375	5840	1.30	1.935	<0.1	0.04	0.185	9.1	0.005	860	18.450
99MOB2010	MOB990167	402005	6914817	15	23.60	1.690	0.820	0.600	9680	1.25	2.960	<0.1	0.05	0.275	13.3	0.010	835	27.100
99MOB2011	MOB990167	402005	6914817	15	24.30	1.885	0.875	0.670	9920	1.35	3.260	<0.1	0.06	0.300	14.5	0.005	880	26.200
99MOB2012	MOB990167	402005	6914817	15	16.60	0.795	0.385	0.270	8060	1.10	1.335	<0.1	0.03	0.135	4.6	0.005	870	11.450
99MOB2029	MOB990175	349732	6884943	15	74.20	2.340	1.060	0.820	11570	3.00	3.780	<0.4	0.08	0.360	7.6	<0.020	1300	28.600
99MOB2030	MOB990175	349732	6884943	15	73.60	2.440	1.080	0.840	11920	2.80	4.200	<0.4	0.04	0.400	7.2	0.020	1170	28.900
99MOB2031	MOB990175	349732	6884943	15	55.60	2.080	0.980	0.740	9220	2.80	4.020	<0.4	0.04	0.360	5.2	<0.020	1040	26.600
99MOB2032	MOB990175	349732	6884943	15	60.20	2.820	1.260	0.920	12550	3.00	4.680	<0.4	0.04	0.400	8.4	<0.020	1105	31.000
99MOB2033	MOB990175	349732	6884943	15	44.90	2.360	1.060	0.730	7100	1.80	3.810	<0.1	0.05	0.380	5.5	0.010	890	26.100
99MOB2048	MOB990182	421700	6935690	15	37.10	1.295	0.575	0.495	7570	1.70	2.260	<0.1	0.07	0.200	8.7	0.010	1210	23.900
99MOB2049	MOB990182	421700	6935690	15	39.40	1.660	0.660	0.640	10960	2.80	3.020	<0.4	0.08	0.220	9.2	<0.020	1745	28.800
99MOB2050	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2051	MOB990182	421700	6935690	15	35.80	1.900	0.780	0.700	11050	3.00	3.300	<0.4	0.12	0.260	11.6	<0.020	1820	30.500
99MOB2052	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2053	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2054	MOB990182	421700	6935690	15	34.50	2.410	1.070	0.885	10580	1.50	4.390	<0.1	0.04	0.370	12.4	0.005	900	49.000

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm fraction)
by ICP-MS, Hot Hydroxylamine Hydrochloride (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Li ppm	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Nd ppm	Ni ppm	P ppm	Pb ppm	Pr ppm	Rb ppm	Re ppm
99MOB2007	MOB990167	402005	6914817	15	10.50	0.090	2720	96.6	0.10	7690	0.18	28.900	14.90	5530	11.0	8.580	13.50	<0.002
99MOB2008	MOB990167	402005	6914817	15	8.20	0.080	2220	60.3	0.10	10270	0.20	24.100	10.80	6430	13.2	6.880	11.65	<0.002
99MOB2009	MOB990167	402005	6914817	15	7.25	0.060	1900	50.3	0.06	8710	0.16	15.350	10.40	6080	8.7	4.420	10.25	<0.001
99MOB2010	MOB990167	402005	6914817	15	7.80	0.095	1910	58.6	0.08	5720	0.16	23.600	12.60	1915	12.1	6.810	10.20	<0.001
99MOB2011	MOB990167	402005	6914817	15	7.60	0.095	1915	68.2	0.09	4470	0.16	24.900	12.40	1130	12.0	6.990	10.65	<0.001
99MOB2012	MOB990167	402005	6914817	15	7.15	0.045	1990	63.5	0.08	5520	0.12	10.050	9.85	2980	13.3	2.770	8.62	<0.001
99MOB2029	MOB990175	349732	6884943	15	13.80	0.120	3130	522.0	0.12	7730	0.60	30.300	21.60	6460	26.0	8.160	23.40	<0.004
99MOB2030	MOB990175	349732	6884943	15	13.20	0.100	2950	477.0	0.12	5310	0.64	30.900	21.80	3900	28.4	8.340	23.10	<0.004
99MOB2031	MOB990175	349732	6884943	15	10.40	0.100	2690	313.0	0.08	4950	0.52	27.600	17.40	4570	29.6	7.540	18.20	<0.004
99MOB2032	MOB990175	349732	6884943	15	13.50	0.120	3260	281.0	0.08	5240	0.72	33.600	18.40	3240	25.6	9.140	18.90	<0.004
99MOB2033	MOB990175	349732	6884943	15	10.95	0.115	2380	231.0	0.05	7650	0.34	28.000	15.35	6340	19.2	7.700	13.60	<0.001
99MOB2048	MOB990182	421700	6935690	15	10.95	0.055	2460	250.0	0.04	10850	0.23	19.950	17.40	12360	18.4	5.730	22.40	<0.001
99MOB2049	MOB990182	421700	6935690	15	12.60	0.060	3230	389.0	0.08	9520	0.48	24.800	19.80	11690	23.4	7.140	32.10	<0.004
99MOB2050	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2051	MOB990182	421700	6935690	15	13.20	0.080	3530	388.0	0.08	16180	0.64	28.100	21.00	21900	22.0	7.840	34.00	<0.004
99MOB2052	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2053	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2054	MOB990182	421700	6935690	15	10.20	0.115	2610	249.0	0.05	12040	0.24	40.200	20.30	7500	17.3	11.550	13.80	<0.001

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm fraction)
by ICP-MS, Hot Hydroxylamine Hydrochloride (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Sb ppm	Se ppm	Sm ppm	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm
99MOB2007	MOB990167	402005	6914817	15	0.040	<1.0	4.170	<0.10	36.00	<0.02	0.390	<0.10	14.10	68	0.180	0.100	3.370	17.50
99MOB2008	MOB990167	402005	6914817	15	0.050	<1.0	3.720	<0.10	8.60	<0.02	0.360	<0.10	10.00	66	0.120	0.090	1.900	31.30
99MOB2009	MOB990167	402005	6914817	15	0.035	<0.5	2.340	<0.05	12.75	<0.01	0.225	<0.05	11.10	58	0.120	0.060	1.220	22.70
99MOB2010	MOB990167	402005	6914817	15	0.040	<0.5	3.740	<0.05	13.80	0.01	0.385	<0.05	5.07	33	0.120	0.100	2.170	30.80
99MOB2011	MOB990167	402005	6914817	15	0.035	<0.5	3.990	<0.05	11.10	0.01	0.395	<0.05	4.33	32	0.125	0.110	2.350	30.80
99MOB2012	MOB990167	402005	6914817	15	0.025	<0.5	1.715	<0.05	10.05	<0.01	0.170	<0.05	3.40	41	0.095	0.045	0.915	23.50
99MOB2029	MOB990175	349732	6884943	15	0.020	<2.0	5.000	<0.20	18.00	<0.04	0.500	<0.20	15.60	180	0.280	0.120	1.640	22.80
99MOB2030	MOB990175	349732	6884943	15	0.020	<2.0	5.280	<0.20	20.20	<0.04	0.540	<0.20	10.40	200	0.300	0.120	1.720	24.60
99MOB2031	MOB990175	349732	6884943	15	0.020	<2.0	4.680	<0.20	20.20	<0.04	0.520	<0.20	13.60	186	0.260	0.100	1.700	18.20
99MOB2032	MOB990175	349732	6884943	15	0.020	<2.0	5.940	<0.20	14.80	<0.04	0.640	<0.20	5.60	220	0.260	0.140	2.520	27.80
99MOB2033	MOB990175	349732	6884943	15	0.020	<0.5	4.860	<0.05	15.50	0.02	0.505	<0.05	7.05	77	0.170	0.130	1.370	18.05
99MOB2048	MOB990182	421700	6935690	15	0.035	<0.5	2.980	<0.05	12.70	0.01	0.300	<0.05	27.50	113	0.310	0.065	0.705	16.10
99MOB2049	MOB990182	421700	6935690	15	0.040	<2.0	4.020	<0.20	13.60	<0.04	0.360	<0.20	43.40	248	0.400	0.060	1.040	23.00
99MOB2050	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2051	MOB990182	421700	6935690	15	0.080	<2.0	4.420	<0.20	14.20	<0.04	0.400	<0.20	49.60	350	0.380	0.080	1.200	25.60
99MOB2052	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2053	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2054	MOB990182	421700	6935690	15	0.035	<0.5	5.670	<0.05	12.35	0.01	0.530	<0.05	10.25	65	0.175	0.130	1.325	30.10

Appendix XVIIIb: Chemical Fractionation in Till (<2 µm fraction) by ICP-MS, Hot Hydroxylamine Hydrochloride (not in sequence)

Sample	Station ID	Easting	Northing	UTM	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
99MOB2007	MOB990167	402005	6914817	15	<0.02	7.730	0.650	26.6	1.90
99MOB2008	MOB990167	402005	6914817	15	<0.02	6.310	0.590	20.4	1.50
99MOB2009	MOB990167	402005	6914817	15	0.01	4.710	0.405	19.4	1.40
99MOB2010	MOB990167	402005	6914817	15	0.02	6.810	0.650	20.0	1.75
99MOB2011	MOB990167	402005	6914817	15	0.01	7.320	0.695	20.2	1.65
99MOB2012	MOB990167	402005	6914817	15	<0.01	3.420	0.305	19.2	1.00
99MOB2029	MOB990175	349732	6884943	15	0.08	8.620	0.780	40.4	2.40
99MOB2030	MOB990175	349732	6884943	15	0.08	8.980	0.780	41.8	2.20
99MOB2031	MOB990175	349732	6884943	15	0.08	8.360	0.700	31.8	1.60
99MOB2032	MOB990175	349732	6884943	15	0.08	10.050	0.920	32.6	2.40
99MOB2033	MOB990175	349732	6884943	15	0.03	9.290	0.845	26.2	1.40
99MOB2048	MOB990182	421700	6935690	15	0.03	4.740	0.425	29.2	2.00
99MOB2049	MOB990182	421700	6935690	15	0.04	5.600	0.500	35.4	3.40
99MOB2050	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2051	MOB990182	421700	6935690	15	<0.04	6.800	0.580	34.8	5.60
99MOB2052	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2053	MOB990182	421700	6935690	15	not/ss	not/ss	not/ss	not/ss	not/ss
99MOB2054	MOB990182	421700	6935690	15	0.02	9.190	0.835	22.2	1.10

Appendix XVIII
Chemical Fractionation Studies
Part C: Till, <0.063 mm fraction

Note:

Leach 1 of 2: Hot Hydroxylamine Hydrochloride

Analytical extraction: 0.25M $NH_2OH.HCl$ in 0.25M HCl for 2 hours at 60°C, 1 g in 20 ml solution, pH = 10

Analytical Method: inductively coupled plasma mass spectrometry

Laboratory: Chemex Ltd.

Leach 2 of 2: Hot Aqua Regia

Analytical extraction: Aqua Regia (HCL-HNO_3, 3:1)

Analytical Method: inductively coupled plasma mass spectrometry/ inductively coupled plasma atomic emission spectrometry

Laboratory: Chemex Ltd.

Detection Limits

ICP-MS:

Element	DL
Ag (ppm)	0.002
Al (ppm)	1
As (ppm)	0.1
Au (ppm)	0.05
B (ppm)	2
Ba (ppm)	0.05
Be (ppm)	0.05
Bi (ppm)	0.005
Br (ppm)	2
Ca (ppm)	10
Cd (ppm)	0.01
Ce (ppm)	0.005
Co (ppm)	0.05
Cr (ppm)	0.05
Cs (ppm)	0.005
Cu (ppm)	0.05
Dy (ppm)	0.005
Er (ppm)	0.005
Eu (ppm)	0.005
Fe (ppm)	5
Ga (ppm)	0.05
Gd (ppm)	0.005
Ge (ppm)	0.1
Hf (ppm)	0.01
Hg (ppm)	0.1
Ho (ppm)	0.005
I (ppm)	0.1
In (ppm)	0.005
K (ppm)	5
La (ppm)	0.005
Li (ppm)	0.05
Lu (ppm)	0.005
Mg (ppm)	1
Mn (ppm)	0.1
Mo (ppm)	0.01
Na (ppm)	10
Nb (ppm)	0.01
Nd (ppm)	0.005
Ni (ppm)	0.05
P (ppm)	5
Pb (ppm)	0.1
Pr (ppm)	0.005
Rb (ppm)	0.01
Re (ppm)	0.001
Sb (ppm)	0.005
Se (ppm)	0.5
Sm (ppm)	0.005
Sn (ppm)	0.05
Sr (ppm)	0.05
Ta (ppm)	0.01
Tb (ppm)	0.005
Te (ppm)	0.05
Th (ppm)	0.01
Ti (ppm)	1
Tl (ppm)	0.005
Tm (ppm)	0.005
U (ppm)	0.005
V (ppm)	0.05
W (ppm)	0.01
Y (ppm)	0.005
Yb (ppm)	0.005
Zn (ppm)	0.2
Zr (ppm)	0.05

ICP-MS/ICP-AES:

Element	DL
Ag (ppm)	0.02
Al (%)	0.01
As (ppm)	0.2
Ba (ppm)	10
Be (ppm)	0.5
Bi (ppm)	0.02
Ca (%)	0.01
Cd (ppm)	0.1
Co (ppm)	1
Cr (ppm)	1
Cu (ppm)	0.5
Fe (%)	0.01
Ga (ppm)	0.5
Ge (ppm)	0.1
Hg (ppm)	0.01
K (%)	0.01
La (ppm)	10
Mg (%)	0.01
Mn (ppm)	5
Mo (ppm)	0.2
Na (%)	0.01
Ni (ppm)	1
P (ppm)	10
Pb (ppm)	2
Sb (ppm)	0.1
Sc (ppm)	1
Sr (ppm)	1
Te (ppm)	0.1
Ti (%)	0.01
Tl (ppm)	0.1
U (ppm)	0.05
V (ppm)	1
W (ppm)	0.05
Zn (ppm)	2

Appendix XVIIIc: Chemical Fractionation in Till (<63 µm) by ICP-MS, Leach 1 of 2: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Cl ppm	Co ppm	Cr ppm	Cs ppm
97MOB0005	97MITE-2	389326	6912075	15	0.034	3960	1.1	<0.05	<2	98.50	0.50	0.265	2	3320	0.03	35.900	---	2.65	9.65	0.525
97MOB0006	97MITE-2	389326	6912075	15	0.032	4190	1.0	<0.05	<2	124.00	0.55	0.280	<2	3370	0.05	53.800	---	2.80	9.45	0.570
97MOB0007	97MITE-2	389326	6912075	15	0.028	4000	1.1	<0.05	<2	112.50	0.50	0.160	4	2960	0.04	36.400	---	3.10	10.15	0.500
97MOB0008	97MITE-2	389326	6912075	15	0.032	3400	0.7	<0.05	2	171.50	0.65	0.320	<2	1400	0.06	55.800	---	1.30	4.50	0.815
97MOB0009	97MITE-2	389326	6912075	15	0.020	3600	1.0	<0.05	<2	79.70	0.35	0.110	2	2600	0.03	27.900	---	2.60	8.30	0.415
97MOB0010	97MITE-2	389326	6912075	15	0.020	2130	0.9	<0.05	<2	62.80	0.25	0.210	<2	2610	0.03	30.200	---	1.85	5.55	0.405
97MOB0011	97MITE-2	389326	6912075	15	0.016	1125	0.6	<0.05	<2	27.80	0.15	0.175	<2	2720	0.01	25.100	---	1.60	3.40	0.190
97MOB0015	97MITE-3	390102	6911081	15	0.010	1025	0.6	0.05	<2	26.30	0.05	0.120	<2	1710	0.02	23.900	---	1.80	2.60	0.290
97MOB0016	97MITE-3	390102	6911081	15	0.010	1000	0.8	<0.05	<2	16.90	<0.05	0.060	2	1600	0.01	15.450	---	2.20	3.35	0.160
97MOB0017	97MITE-3	390102	6911081	15	0.008	1005	0.7	<0.05	<2	19.50	0.10	0.170	<2	1990	0.01	18.650	---	1.85	3.05	0.180
97MOB0018	97MITE-3	390102	6911081	15	0.018	836	0.7	<0.05	<2	13.15	0.05	0.040	2	1590	<0.01	16.150	---	1.30	2.30	0.115
97MOB0019	97MITE-3	390102	6911081	15	0.008	546	0.5	<0.05	<2	12.45	0.05	0.160	<2	1950	0.01	23.600	---	0.80	1.60	0.105
97MOB0066	97MITE-9	394512	6906204	15	0.026	1675	0.2	<0.05	4	32.40	0.30	0.265	2	2750	0.02	33.200	---	0.90	2.20	0.310
97MOB0067	97MITE-9	394512	6906204	15	0.008	586	0.4	<0.05	<2	10.90	0.05	0.155	<2	1710	0.01	16.100	---	0.55	1.40	0.110
97MOB0068	97MITE-9	394512	6906204	15	0.008	637	0.4	<0.05	<2	10.95	0.05	0.165	<2	1830	0.01	19.550	---	0.60	1.45	0.100
97MOB0069	97MITE-9	394512	6906204	15	0.012	593	0.5	<0.05	<2	10.55	0.05	0.160	<2	1870	0.01	19.900	---	0.55	1.40	0.105
97MOB0070	97MITE-9	394512	6906204	15	0.010	604	0.5	<0.05	<2	10.45	0.05	0.155	<2	1560	0.01	18.850	---	0.60	1.60	0.120
97MOB0074	97MITE-10	395217	6905369	15	0.018	2200	0.2	<0.05	2	69.50	0.60	0.290	<2	2850	0.02	35.200	---	1.40	3.20	0.410
97MOB0075	97MITE-10	395217	6905369	15	0.012	1100	0.7	<0.05	<2	27.80	0.05	0.050	2	2050	0.01	17.500	---	1.30	3.55	0.180
97MOB0076	97MITE-10	395217	6905369	15	0.014	1260	<0.1	<0.05	2	26.90	0.10	0.180	4	3560	0.01	19.550	---	1.00	3.15	0.185
97MOB0077	97MITE-10	395217	6905369	15	0.008	700	0.4	<0.05	<2	19.50	0.05	0.040	<2	1780	0.01	13.500	---	0.85	2.25	0.130
97MOB0078	97MITE-10	395217	6905369	15	0.010	830	<0.1	<0.05	<2	17.00	0.10	0.155	4	3180	0.01	16.650	---	0.75	2.70	0.110
97MOB0079	97MITE-10	395217	6905369	15	0.008	427	0.4	<0.05	<2	15.70	0.05	0.160	<2	1730	<0.01	16.450	---	0.50	1.40	0.085
97MOB0080	97MITE-10	395217	6905369	15	0.012	514	0.3	<0.05	<2	15.75	0.05	0.155	<2	1890	0.01	17.800	---	0.80	2.40	0.100
99MOB2007	MOB990167	402005	6914817	15	0.050	3850	0.9	<0.05	<2	94.50	0.40	0.160	2	4980	0.06	89.700	---	2.65	6.35	0.375
99MOB2008	MOB990167	402005	6914817	15	0.016	1275	1.0	<0.05	<2	23.70	0.15	0.085	<2	2020	0.01	28.900	---	0.95	4.40	0.200
99MOB2009	MOB990167	402005	6914817	15	0.036	2310	0.9	<0.05	<2	51.70	0.20	0.115	2	2440	0.03	49.400	---	1.60	5.30	0.295
99MOB2010	MOB990167	402005	6914817	15	0.024	1470	0.6	<0.05	<2	29.30	0.05	0.125	<2	2040	0.01	30.000	---	1.05	3.75	0.245
99MOB2011	MOB990167	402005	6914817	15	0.024	1540	1.0	<0.05	<2	29.40	0.15	0.130	<2	2100	<0.01	31.800	---	1.10	4.00	0.255
99MOB2012	MOB990167	402005	6914817	15	0.022	1225	1.3	<0.05	<2	23.10	0.10	0.065	<2	2020	0.01	28.900	---	1.10	3.90	0.220
99MOB2029	MOB990175	349732	6884943	15	0.022	1405	0.6	<0.05	<2	18.15	0.10	0.095	<2	1590	0.01	22.800	---	2.25	3.00	0.250
99MOB2030	MOB990175	349732	6884943	15	0.020	1575	0.7	<0.05	<2	19.35	0.15	0.165	<2	1580	0.01	24.500	---	2.90	3.90	0.275
99MOB2031	MOB990175	349732	6884943	15	0.018	1845	0.8	<0.05	<2	25.10	0.10	0.125	<2	2050	0.02	29.900	---	3.00	4.65	0.265
99MOB2032	MOB990175	349732	6884943	15	0.014	1325	0.8	<0.05	<2	18.75	0.05	0.090	<2	1860	0.02	22.200	---	1.35	2.90	0.210
99MOB2033	MOB990175	349732	6884943	15	0.012	1135	0.5	<0.05	<2	16.80	0.05	0.100	<2	1880	0.01	24.000	---	1.05	2.30	0.165
99MOB2034	MOB990175	349732	6884943	15	0.008	1105	0.7	<0.05	<2	15.45	0.10	0.070	<2	1740	<0.01	24.500	---	1.00	2.40	0.155
99MOB2048	MOB990182	421700	6935690	15	0.010	887	0.8	<0.05	<2	17.40	<0.05	0.070	<2	1920	0.01	21.600	---	1.00	1.95	0.235
99MOB2049	MOB990182	421700	6935690	15	0.016	1295	0.6	<0.05	<2	24.10	0.10	0.080	<2	1950	0.03	28.800	---	2.40	3.80	0.325
99MOB2050	MOB990182	421700	6935690	15	0.010	1000	0.8	<0.05	<2	18.60	0.05	0.125	<2	1880	0.01	21.200	---	1.35	2.15	0.265
99MOB2051	MOB990182	421700	6935690	15	0.010	1040	0.8	<0.05	<2	18.70	0.05	0.195	<2	1880	0.01	22.500	---	1.50	2.55	0.270
99MOB2052	MOB990182	421700	6935690	15	0.018	1260	0.9	<0.05	<2	23.90	0.05	0.120	<2	1950	0.02	27.100	---	1.65	3.45	0.280
99MOB2053	MOB990182	421700	6935690	15	0.016	1220	0.7	<0.05	<2	21.40	0.05	0.075	<2	1760	0.03	29.500	---	1.45	3.40	0.225
99MOB2054	MOB990182	421700	6935690	15	0.014	1270	0.8	<0.05	<2	23.60	0.05	0.070	<2	1860	0.01	32.400	---	1.50	3.40	0.215

Appendix XVIIIc: Chemical Fractionation in Till (<63 µm) by ICP-MS, Leach 1 of 2: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Ge ppm	Gd ppm	Hf ppm	Hg ppm	Ho ppm	I ppm	In ppm	K ppm	La ppm
97MOB0005	97MITE-2	389326	6912075	15	28.80	1.765	0.845	0.500	7300	1.85	<0.1	2.710	0.03	<0.1	0.285	0.2	0.005	1530	22.700
97MOB0006	97MITE-2	389326	6912075	15	29.50	1.940	0.935	0.600	7360	1.90	<0.1	2.980	0.03	<0.1	0.315	0.3	0.005	1625	27.700
97MOB0007	97MITE-2	389326	6912075	15	30.90	1.510	0.755	0.460	4850	1.80	<0.1	2.500	0.02	<0.1	0.240	0.2	0.005	1435	23.400
97MOB0008	97MITE-2	389326	6912075	15	12.60	3.190	1.505	0.820	2350	0.90	<0.1	4.730	0.06	<0.1	0.505	0.6	0.005	835	34.300
97MOB0009	97MITE-2	389326	6912075	15	25.50	1.135	0.540	0.350	4040	1.40	<0.1	1.875	0.01	<0.1	0.190	0.1	<0.005	1090	17.850
97MOB0010	97MITE-2	389326	6912075	15	14.65	1.375	0.640	0.415	2860	1.10	<0.1	2.090	0.02	<0.1	0.215	0.1	<0.005	835	18.350
97MOB0011	97MITE-2	389326	6912075	15	8.10	1.065	0.505	0.300	1735	0.70	<0.1	1.760	0.01	<0.1	0.175	<0.1	<0.005	400	13.150
97MOB0015	97MITE-3	390102	6911081	15	2.80	0.955	0.420	0.255	1355	0.45	<0.1	1.475	0.01	<0.1	0.145	0.4	<0.005	115	9.280
97MOB0016	97MITE-3	390102	6911081	15	4.20	0.490	0.225	0.145	1435	0.50	<0.1	0.840	<0.01	<0.1	0.080	0.1	<0.005	145	6.360
97MOB0017	97MITE-3	390102	6911081	15	3.65	0.705	0.325	0.195	1505	0.60	<0.1	1.145	<0.01	<0.1	0.115	0.2	<0.005	155	8.560
97MOB0018	97MITE-3	390102	6911081	15	3.45	0.545	0.235	0.140	1055	0.40	<0.1	0.895	<0.01	<0.1	0.080	<0.1	<0.005	80	7.790
97MOB0019	97MITE-3	390102	6911081	15	3.35	0.870	0.355	0.245	830	0.40	<0.1	1.390	<0.01	<0.1	0.135	0.1	<0.005	110	11.850
97MOB0066	97MITE-9	394512	6906204	15	2.20	1.495	0.675	0.455	1460	0.60	<0.1	2.170	0.01	<0.1	0.260	1.0	<0.005	90	15.200
97MOB0067	97MITE-9	394512	6906204	15	1.45	0.665	0.305	0.210	875	0.35	<0.1	1.065	<0.01	<0.1	0.110	0.2	<0.005	70	7.500
97MOB0068	97MITE-9	394512	6906204	15	2.05	0.785	0.355	0.235	920	0.40	<0.1	1.265	<0.01	<0.1	0.125	0.2	<0.005	75	9.160
97MOB0069	97MITE-9	394512	6906204	15	1.95	0.790	0.355	0.240	890	0.40	<0.1	1.285	<0.01	<0.1	0.130	0.4	<0.005	75	9.380
97MOB0070	97MITE-9	394512	6906204	15	2.05	0.690	0.305	0.215	1010	0.40	<0.1	1.130	<0.01	<0.1	0.115	0.4	<0.005	75	8.810
97MOB0074	97MITE-10	395217	6905369	15	11.10	1.825	0.940	0.570	2210	0.75	<0.1	2.920	0.04	<0.1	0.320	0.4	<0.005	770	19.200
97MOB0075	97MITE-10	395217	6905369	15	11.15	0.760	0.350	0.210	1740	0.65	<0.1	1.215	0.01	<0.1	0.120	<0.1	<0.005	405	9.730
97MOB0076	97MITE-10	395217	6905369	15	8.65	1.040	0.500	0.290	1615	0.70	<0.1	1.695	0.01	<0.1	0.150	<0.1	<0.005	460	10.750
97MOB0077	97MITE-10	395217	6905369	15	7.10	0.635	0.285	0.165	1150	0.40	<0.1	1.035	<0.01	<0.1	0.095	<0.1	<0.005	270	7.670
97MOB0078	97MITE-10	395217	6905369	15	5.90	0.735	0.335	0.220	1185	0.50	<0.1	1.210	<0.01	<0.1	0.115	<0.1	<0.005	295	8.910
97MOB0079	97MITE-10	395217	6905369	15	3.90	0.745	0.355	0.210	860	0.35	<0.1	1.200	<0.01	<0.1	0.120	<0.1	<0.005	145	9.020
97MOB0080	97MITE-10	395217	6905369	15	4.20	0.740	0.340	0.215	1245	0.40	<0.1	1.210	0.01	<0.1	0.120	<0.1	<0.005	170	8.910
99MOB2007	MOB990167	402005	6914817	15	13.10	1.990	0.870	0.760	4570	0.95	<0.1	3.700	0.04	-----	0.310	14.0	0.005	605	47.000
99MOB2008	MOB990167	402005	6914817	15	4.00	0.850	0.405	0.295	3500	0.50	<0.1	1.605	0.01	-----	0.145	2.0	<0.005	180	13.950
99MOB2009	MOB990167	402005	6914817	15	8.10	1.270	0.560	0.465	3620	0.80	<0.1	2.280	0.04	-----	0.185	5.2	<0.005	325	24.300
99MOB2010	MOB990167	402005	6914817	15	4.60	0.890	0.420	0.325	2610	0.60	<0.1	1.635	0.01	-----	0.150	2.5	<0.005	230	14.900
99MOB2011	MOB990167	402005	6914817	15	4.85	0.920	0.425	0.325	2730	0.65	<0.1	1.655	0.01	-----	0.150	2.7	<0.005	265	15.550
99MOB2012	MOB990167	402005	6914817	15	3.35	0.865	0.425	0.300	2740	0.55	<0.1	1.595	0.01	-----	0.145	1.6	<0.005	240	14.050
99MOB2029	MOB990175	349732	6884943	15	8.20	0.755	0.340	0.210	1735	0.45	<0.1	1.290	<0.01	-----	0.115	0.7	<0.005	140	8.750
99MOB2030	MOB990175	349732	6884943	15	8.85	0.810	0.360	0.245	1925	0.55	<0.1	1.325	0.01	-----	0.130	0.8	<0.005	145	9.390
99MOB2031	MOB990175	349732	6884943	15	10.50	0.960	0.445	0.285	2300	0.65	<0.1	1.665	<0.01	-----	0.170	0.9	<0.005	170	12.500
99MOB2032	MOB990175	349732	6884943	15	6.10	0.830	0.390	0.230	1555	0.45	<0.1	1.455	<0.01	-----	0.145	0.6	<0.005	125	9.900
99MOB2033	MOB990175	349732	6884943	15	4.85	0.930	0.420	0.270	1270	0.40	<0.1	1.545	<0.01	-----	0.160	0.4	<0.005	115	11.050
99MOB2034	MOB990175	349732	6884943	15	5.10	0.935	0.410	0.275	1255	0.40	<0.1	1.575	<0.01	-----	0.150	0.5	<0.005	120	11.600
99MOB2048	MOB990182	421700	6935690	15	4.30	0.650	0.290	0.230	1260	0.35	<0.1	1.180	<0.01	-----	0.100	0.6	<0.005	170	9.950
99MOB2049	MOB990182	421700	6935690	15	5.30	0.720	0.335	0.280	1860	0.50	<0.1	1.380	0.01	-----	0.115	0.9	<0.005	200	12.350
99MOB2050	MOB990182	421700	6935690	15	4.10	0.695	0.320	0.225	1410	0.40	<0.1	1.205	<0.01	-----	0.105	0.6	<0.005	170	9.630
99MOB2051	MOB990182	421700	6935690	15	4.70	0.710	0.295	0.245	1535	0.50	<0.1	1.250	<0.01	-----	0.110	0.7	<0.005	165	10.100
99MOB2052	MOB990182	421700	6935690	15	4.40	0.810	0.335	0.290	1885	0.50	<0.1	1.455	<0.01	-----	0.130	1.0	<0.005	165	12.200
99MOB2053	MOB990182	421700	6935690	15	4.75	0.775	0.360	0.305	2160	0.55	<0.1	1.535	<0.01	-----	0.120	1.1	<0.005	135	13.500
99MOB2054	MOB990182	421700	6935690	15	5.45	0.825	0.350	0.300	2360	0.50	<0.1	1.530	0.01	-----	0.125	1.6	<0.005	155	15.150

Appendix XVIIIc: Chemical Fractionation in Till (<63 µm)
by ICP-MS, Leach 1 of 2: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Li ppm	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Nd ppm	Ni ppm	P ppm	Pb ppm	Pr ppm	Rb ppm	Re ppm	Sb ppm	Se ppm	Sm ppm
97MOB0005	97MITE-2	389326	6912075	15	7.15	0.090	1960	73.3	<0.01	120	0.04	17.850	10.45	915	12.3	5.070	10.35	<0.001	<0.005	<0.5	3.020
97MOB0006	97MITE-2	389326	6912075	15	7.95	0.105	2020	96.9	<0.01	120	0.04	21.200	10.85	905	13.9	6.120	9.82	<0.001	<0.005	<0.5	3.530
97MOB0007	97MITE-2	389326	6912075	15	7.05	0.075	2140	87.7	0.01	160	0.05	16.900	12.55	830	10.1	4.900	10.10	<0.001	<0.005	<0.5	2.750
97MOB0008	97MITE-2	389326	6912075	15	9.00	0.175	1625	42.9	<0.01	130	0.04	28.200	4.45	575	26.9	8.160	6.64	<0.001	<0.005	<0.5	5.240
97MOB0009	97MITE-2	389326	6912075	15	5.15	0.055	1615	69.6	0.01	120	0.05	12.750	10.65	775	8.1	3.720	7.99	<0.001	<0.005	<0.5	2.150
97MOB0010	97MITE-2	389326	6912075	15	3.95	0.070	1120	51.1	0.03	70	0.06	15.000	5.95	890	9.6	4.070	6.25	<0.001	<0.005	<0.5	2.400
97MOB0011	97MITE-2	389326	6912075	15	1.90	0.050	621	44.1	0.01	50	0.08	10.950	3.80	1080	5.4	3.000	3.19	<0.001	<0.005	<0.5	1.895
97MOB0015	97MITE-3	390102	6911081	15	2.30	0.035	683	43.9	0.02	40	0.10	8.600	2.70	700	8.3	2.410	2.04	<0.001	<0.005	<0.5	1.615
97MOB0016	97MITE-3	390102	6911081	15	1.15	0.020	464	50.7	0.03	30	0.14	5.430	3.30	695	3.5	1.460	2.21	<0.001	<0.005	<0.5	0.925
97MOB0017	97MITE-3	390102	6911081	15	1.60	0.030	534	44.6	0.04	30	0.12	7.210	2.80	810	5.4	1.950	2.17	<0.001	<0.005	<0.5	1.245
97MOB0018	97MITE-3	390102	6911081	15	0.90	0.020	345	32.8	0.03	30	0.12	5.680	2.35	695	3.6	1.630	1.46	<0.001	<0.005	<0.5	0.985
97MOB0019	97MITE-3	390102	6911081	15	0.65	0.030	211	20.8	0.02	20	0.11	9.500	1.40	875	5.0	2.630	1.19	<0.001	<0.005	<0.5	1.590
97MOB0066	97MITE-9	394512	6906204	15	2.90	0.075	539	27.9	0.04	30	0.11	15.350	1.70	1075	10.9	4.100	2.10	<0.001	0.005	<0.5	2.760
97MOB0067	97MITE-9	394512	6906204	15	0.65	0.030	176	14.2	0.03	10	0.11	6.800	1.15	775	4.0	1.875	0.95	<0.001	<0.005	<0.5	1.195
97MOB0068	97MITE-9	394512	6906204	15	1.10	0.035	190	16.4	0.03	10	0.12	8.270	1.20	840	4.6	2.200	1.07	<0.001	<0.005	<0.5	1.420
97MOB0069	97MITE-9	394512	6906204	15	0.95	0.030	183	15.7	0.04	10	0.12	8.630	1.30	865	6.7	2.290	1.06	<0.001	0.005	<0.5	1.475
97MOB0070	97MITE-9	394512	6906204	15	0.80	0.030	200	17.1	0.04	10	0.12	7.800	1.25	705	7.4	2.150	1.00	<0.001	<0.005	<0.5	1.300
97MOB0074	97MITE-10	395217	6905369	15	5.25	0.120	1185	43.0	0.02	80	0.06	18.900	5.05	1125	15.3	5.190	4.64	<0.001	<0.005	<0.5	3.300
97MOB0075	97MITE-10	395217	6905369	15	1.65	0.030	578	35.1	0.03	50	0.07	7.710	4.30	795	4.0	2.190	3.06	<0.001	<0.005	<0.5	1.340
97MOB0076	97MITE-10	395217	6905369	15	2.40	0.050	608	29.0	0.01	50	0.09	10.650	3.25	1270	5.9	2.820	2.92	<0.001	<0.005	<0.5	1.790
97MOB0077	97MITE-10	395217	6905369	15	1.00	0.025	375	23.3	0.02	30	0.09	6.120	3.00	715	3.3	1.780	1.92	<0.001	<0.005	<0.5	1.110
97MOB0078	97MITE-10	395217	6905369	15	1.25	0.035	388	22.2	0.01	40	0.09	8.370	2.40	1175	4.2	2.290	1.84	<0.001	<0.005	<0.5	1.365
97MOB0079	97MITE-10	395217	6905369	15	0.55	0.035	201	14.0	0.02	10	0.09	7.910	1.50	755	4.3	2.120	0.98	<0.001	<0.005	<0.5	1.340
97MOB0080	97MITE-10	395217	6905369	15	0.75	0.035	246	22.5	0.02	10	0.09	7.690	1.80	770	4.0	2.090	1.37	<0.001	<0.005	<0.5	1.330
99MOB2007	MOB990167	402005	6914817	15	3.65	0.090	1445	75.8	0.05	130	0.09	32.200	7.40	665	6.0	9.660	5.65	<0.001	0.015	<0.5	4.720
99MOB2008	MOB990167	402005	6914817	15	1.85	0.040	604	19.1	0.04	30	0.07	11.750	2.40	810	3.7	3.200	2.43	<0.001	0.005	<0.5	1.840
99MOB2009	MOB990167	402005	6914817	15	2.85	0.055	937	27.7	0.05	50	0.07	18.600	4.50	660	5.2	5.310	4.42	<0.001	0.015	<0.5	2.830
99MOB2010	MOB990167	402005	6914817	15	2.25	0.040	669	20.8	0.04	30	0.08	12.100	2.60	800	4.0	3.390	3.34	<0.001	0.005	<0.5	1.930
99MOB2011	MOB990167	402005	6914817	15	2.30	0.040	696	22.5	0.04	30	0.07	12.750	2.65	815	4.1	3.550	3.60	<0.001	0.01	<0.5	2.010
99MOB2012	MOB990167	402005	6914817	15	2.00	0.045	609	21.5	0.06	30	0.08	11.600	2.35	840	3.8	3.270	2.96	<0.001	0.005	<0.5	1.890
99MOB2029	MOB990175	349732	6884943	15	2.10	0.035	518	54.7	0.03	20	0.10	8.180	3.10	730	4.0	2.170	2.66	<0.001	<0.005	<0.5	1.445
99MOB2030	MOB990175	349732	6884943	15	2.65	0.035	595	58.9	0.03	20	0.12	9.130	3.55	695	4.7	2.400	2.95	<0.001	<0.005	<0.5	1.535
99MOB2031	MOB990175	349732	6884943	15	2.70	0.040	753	59.9	0.02	30	0.11	11.300	4.30	885	5.1	3.120	3.12	<0.001	0.005	<0.5	2.050
99MOB2032	MOB990175	349732	6884943	15	1.55	0.040	503	28.7	0.01	20	0.11	9.350	2.60	810	3.9	2.500	2.16	<0.001	<0.005	<0.5	1.660
99MOB2033	MOB990175	349732	6884943	15	1.25	0.040	400	23.2	0.01	20	0.09	10.550	1.95	865	3.7	2.820	1.85	<0.001	<0.005	<0.5	1.800
99MOB2034	MOB990175	349732	6884943	15	1.30	0.035	392	21.0	0.01	30	0.09	10.500	2.10	810	3.5	2.820	1.98	<0.001	<0.005	<0.5	1.780
99MOB2048	MOB990182	421700	6935690	15	1.25	0.030	378	23.2	0.01	30	0.08	8.380	2.25	895	4.6	2.320	2.87	<0.001	<0.005	<0.5	1.370
99MOB2049	MOB990182	421700	6935690	15	2.00	0.030	611	49.6	0.03	30	0.08	9.830	3.60	855	5.8	2.750	3.79	<0.001	<0.005	<0.5	1.510
99MOB2050	MOB990182	421700	6935690	15	1.30	0.030	421	28.0	0.01	30	0.08	8.250	2.30	880	4.1	2.250	3.06	<0.001	0.005	<0.5	1.410
99MOB2051	MOB990182	421700	6935690	15	1.40	0.030	452	30.5	0.02	30	0.09	8.850	2.45	860	4.2	2.430	3.10	<0.001	<0.005	<0.5	1.500
99MOB2052	MOB990182	421700	6935690	15	1.65	0.035	562	36.9	0.01	30	0.08	10.550	3.00	890	4.5	2.860	3.18	<0.001	<0.005	<0.5	1.715
99MOB2053	MOB990182	421700	6935690	15	1.80	0.035	540	34.6	0.02	30	0.09	11.300	2.65	790	3.9	3.100	2.76	<0.001	0.015	<0.5	1.765
99MOB2054	MOB990182	421700	6935690	15	1.70	0.035	547	36.7	0.01	30	0.09	12.000	3.00	780	3.6	3.510	2.73	<0.001	<0.005	<0.5	1.890

Appendix XVIIIc: Chemical Fractionation in Till (<63 µm)
by ICP-MS, Leach 1 of 2: Hot Hydroxylamine Hydrochloride

Sample	Station ID	Easting	Northing	UTM	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
97MOB0005	97MITE-2	389326	6912075	15	0.05	21.90	<0.01	0.355	<0.05	1.31	48	0.110	0.095	0.825	7.90	<0.01	7.500	0.655	23.6	1.30
97MOB0006	97MITE-2	389326	6912075	15	0.05	22.30	<0.01	0.405	<0.05	1.53	40	0.130	0.115	0.950	7.75	0.01	8.250	0.705	24.6	1.30
97MOB0007	97MITE-2	389326	6912075	15	0.10	27.50	<0.01	0.320	<0.05	1.31	38	0.110	0.085	0.735	8.45	0.01	7.630	0.555	25.0	1.20
97MOB0008	97MITE-2	389326	6912075	15	0.10	21.30	<0.01	0.615	<0.05	2.75	25	0.300	0.185	1.855	4.30	0.03	5.480	1.165	11.8	0.90
97MOB0009	97MITE-2	389326	6912075	15	0.05	23.60	<0.01	0.240	<0.05	0.75	39	0.085	0.065	0.530	7.00	<0.01	5.760	0.405	19.4	1.00
97MOB0010	97MITE-2	389326	6912075	15	0.05	16.30	<0.01	0.285	<0.05	0.99	48	0.065	0.075	0.660	5.10	0.01	5.640	0.490	12.4	0.95
97MOB0011	97MITE-2	389326	6912075	15	0.05	15.60	<0.01	0.220	<0.05	0.53	45	0.010	0.055	0.435	3.70	0.01	4.850	0.350	6.0	0.70
97MOB0015	97MITE-3	390102	6911081	15	0.05	12.80	<0.01	0.200	<0.05	0.08	48	0.045	0.045	0.430	3.70	0.03	2.330	0.320	4.2	0.25
97MOB0016	97MITE-3	390102	6911081	15	<0.05	13.20	<0.01	0.110	<0.05	0.02	59	0.015	0.025	0.215	3.85	0.01	2.540	0.160	4.8	0.30
97MOB0017	97MITE-3	390102	6911081	15	<0.05	11.45	<0.01	0.155	<0.05	0.03	64	<0.005	0.035	0.315	3.95	0.02	2.960	0.220	4.4	0.25
97MOB0018	97MITE-3	390102	6911081	15	<0.05	13.15	<0.01	0.105	<0.05	0.03	43	0.015	0.025	0.220	2.90	0.01	2.600	0.145	3.0	0.20
97MOB0019	97MITE-3	390102	6911081	15	0.05	10.85	<0.01	0.175	<0.05	0.05	41	<0.005	0.045	0.345	2.05	0.03	3.330	0.235	2.4	0.15
97MOB0066	97MITE-9	394512	6906204	15	0.15	14.85	0.01	0.310	<0.05	0.05	65	0.020	0.080	0.835	3.25	0.06	4.060	0.485	4.2	0.20
97MOB0067	97MITE-9	394512	6906204	15	<0.05	10.10	<0.01	0.140	<0.05	0.01	43	<0.005	0.035	0.260	2.05	0.03	2.750	0.210	2.0	0.10
97MOB0068	97MITE-9	394512	6906204	15	<0.05	10.25	<0.01	0.160	<0.05	0.02	47	<0.005	0.035	0.320	2.20	0.03	3.270	0.250	2.8	0.05
97MOB0069	97MITE-9	394512	6906204	15	<0.05	10.65	<0.01	0.165	<0.05	0.02	46	<0.005	0.040	0.330	2.05	0.04	3.150	0.230	2.8	0.15
97MOB0070	97MITE-9	394512	6906204	15	0.05	8.20	<0.01	0.155	<0.05	0.01	47	<0.005	0.035	0.315	2.25	0.03	2.790	0.210	4.0	0.05
97MOB0074	97MITE-10	395217	6905369	15	0.55	15.80	<0.01	0.390	<0.05	1.28	48	0.140	0.120	1.045	3.30	0.03	5.090	0.745	9.8	0.70
97MOB0075	97MITE-10	395217	6905369	15	0.15	15.65	<0.01	0.150	<0.05	0.23	35	0.035	0.035	0.325	2.95	<0.01	3.580	0.250	7.2	0.55
97MOB0076	97MITE-10	395217	6905369	15	0.15	16.25	<0.01	0.215	<0.05	0.73	56	0.020	0.055	0.425	3.25	0.03	4.610	0.375	7.0	0.60
97MOB0077	97MITE-10	395217	6905369	15	0.10	13.60	<0.01	0.135	<0.05	0.47	29	0.025	0.030	0.260	1.70	0.01	2.860	0.210	4.8	0.55
97MOB0078	97MITE-10	395217	6905369	15	0.15	15.60	<0.01	0.145	<0.05	0.40	42	0.025	0.040	0.340	3.05	0.02	4.260	0.240	4.6	0.45
97MOB0079	97MITE-10	395217	6905369	15	0.05	9.75	<0.01	0.155	<0.05	0.32	24	<.005	0.040	0.335	1.80	0.02	2.920	0.240	3.0	0.30
97MOB0080	97MITE-10	395217	6905369	15	0.05	11.10	<0.01	0.160	<0.05	0.18	31	<.005	0.040	0.330	2.90	0.01	3.260	0.245	3.2	0.65
99MOB2007	MOB990167	402005	6914817	15	<0.05	34.40	<0.01	0.455	<0.05	0.66	31	0.070	0.100	2.940	9.55	0.01	8.280	0.615	11.2	0.85
99MOB2008	MOB990167	402005	6914817	15	<0.05	11.95	<0.01	0.190	<0.05	0.29	36	0.025	0.045	0.590	7.25	<0.01	3.640	0.275	4.2	0.35
99MOB2009	MOB990167	402005	6914817	15	<0.05	16.75	<0.01	0.275	<0.05	0.25	39	0.050	0.065	1.160	9.65	0.01	5.130	0.390	7.0	1.40
99MOB2010	MOB990167	402005	6914817	15	0.20	12.75	<0.01	0.205	<0.05	0.21	44	0.040	0.045	0.700	6.80	0.01	3.760	0.320	4.8	0.25
99MOB2011	MOB990167	402005	6914817	15	3.10	12.65	<0.01	0.215	<0.05	0.27	44	0.050	0.050	0.715	6.95	0.01	3.890	0.300	5.2	0.25
99MOB2012	MOB990167	402005	6914817	15	<0.05	12.20	<0.01	0.195	<0.05	0.29	48	0.035	0.050	0.570	6.95	<0.01	3.790	0.295	4.8	0.25
99MOB2029	MOB990175	349732	6884943	15	<0.05	10.80	<0.01	0.155	<0.05	0.11	52	0.030	0.045	0.290	3.40	0.01	3.180	0.235	5.8	0.25
99MOB2030	MOB990175	349732	6884943	15	<0.05	11.60	<0.01	0.170	<0.05	0.10	59	0.030	0.045	0.340	4.30	0.01	3.370	0.260	6.6	0.30
99MOB2031	MOB990175	349732	6884943	15	<0.05	15.00	<0.01	0.210	<0.05	0.17	70	0.045	0.055	0.415	5.05	0.01	4.150	0.310	6.8	0.30
99MOB2032	MOB990175	349732	6884943	15	<0.05	12.55	<0.01	0.180	<0.05	0.06	56	0.035	0.045	0.335	3.40	0.01	3.620	0.270	4.0	0.15
99MOB2033	MOB990175	349732	6884943	15	<0.05	12.80	<0.01	0.205	<0.05	0.12	47	0.040	0.045	0.365	2.75	0.01	3.940	0.275	3.2	0.15
99MOB2034	MOB990175	349732	6884943	15	<0.05	11.75	<0.01	0.190	<0.05	0.06	51	0.025	0.050	0.340	3.00	0.01	3.980	0.285	3.8	0.05
99MOB2048	MOB990182	421700	6935690	15	<0.05	9.50	<0.01	0.145	<0.05	0.47	45	0.040	0.030	0.245	2.85	0.01	2.730	0.210	3.4	0.20
99MOB2049	MOB990182	421700	6935690	15	0.60	10.10	<0.01	0.165	<0.05	0.49	61	0.040	0.035	0.285	4.45	0.01	2.930	0.225	5.4	0.25
99MOB2050	MOB990182	421700	6935690	15	<0.05	9.40	<0.01	0.150	<0.05	0.37	44	0.055	0.040	0.265	3.15	0.02	2.780	0.220	3.6	0.20
99MOB2051	MOB990182	421700	6935690	15	<0.05	9.50	<0.01	0.155	<0.05	0.53	51	0.035	0.035	0.280	3.75	0.01	2.990	0.230	4.0	0.20
99MOB2052	MOB990182	421700	6935690	15	<0.05	9.80	<0.01	0.180	<0.05	0.31	58	0.035	0.040	0.310	4.70	0.01	3.260	0.280	4.6	0.15
99MOB2053	MOB990182	421700	6935690	15	<0.05	9.30	<0.01	0.175	<0.05	0.24	58	0.170	0.045	0.445	5.65	0.01	3.300	0.235	4.4	0.20
99MOB2054	MOB990182	421700	6935690	15	<0.05	9.25	<0.01	0.175	<0.05	0.21	59	0.030	0.045	0.395	5.70	<0.01	3.480	0.255	4.0	0.40

Appendix XVIIIc: Chemical Fractionation in Till (<63 µm)
by ICP-MS/ICP-AES, Leach 2 of 2: Aqua Regia

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Ge ppm	Hg ppm	K %	La ppm
97MOB0005	97MITE-2	389326	6912075	15	0.02	1.37	1.4	70	0.5	0.12	0.25	<0.1	5	32	11.6	1.69	5.2	0.1	0.01	0.35	10
97MOB0006	97MITE-2	389326	6912075	15	0.02	1.59	1.4	80	0.5	0.14	0.26	<0.1	4	36	12.2	1.83	5.7	0.1	0.01	0.42	20
97MOB0007	97MITE-2	389326	6912075	15	0.02	1.61	1.6	80	0.5	0.14	0.27	<0.1	5	38	12.0	1.86	5.6	0.1	0.01	0.42	20
97MOB0008	97MITE-2	389326	6912075	15	0.02	1.40	1.2	70	0.5	0.14	0.28	<0.1	3	34	11.4	1.75	5.1	0.1	<0.01	0.35	10
97MOB0009	97MITE-2	389326	6912075	15	0.02	1.22	1.0	60	0.5	0.12	0.27	0.1	4	30	10.4	1.59	4.5	0.1	<0.01	0.31	10
97MOB0010	97MITE-2	389326	6912075	15	0.04	0.81	0.8	40	<0.5	0.10	0.26	<0.1	3	23	6.4	1.37	3.1	0.1	<0.01	0.19	10
97MOB0011	97MITE-2	389326	6912075	15	0.04	0.40	0.6	10	<0.5	0.06	0.23	<0.1	1	17	3.2	1.16	1.7	0.1	<0.01	0.08	10
97MOB0015	97MITE-3	390102	6911081	15	0.04	0.31	0.8	10	<0.5	0.06	0.19	<0.1	2	15	3.0	1.05	1.4	0.1	<0.01	0.05	10
97MOB0016	97MITE-3	390102	6911081	15	0.04	0.30	0.6	10	<0.5	0.06	0.20	<0.1	2	14	3.0	1.04	1.4	0.1	<0.01	0.05	10
97MOB0017	97MITE-3	390102	6911081	15	0.04	0.31	0.8	10	<0.5	0.06	0.20	<0.1	3	15	2.8	1.06	1.4	0.2	<0.01	0.05	10
97MOB0018	97MITE-3	390102	6911081	15	0.04	0.29	0.6	10	<0.5	0.06	0.21	<0.1	2	14	2.8	1.06	1.4	0.1	<0.01	0.05	10
97MOB0019	97MITE-3	390102	6911081	15	0.06	0.21	0.4	<10	<0.5	0.06	0.20	<0.1	2	13	2.6	1.00	1.1	0.1	<0.01	0.03	10
97MOB0066	97MITE-9	394512	6906204	15	0.06	0.26	0.8	10	<0.5	0.06	0.18	<0.1	1	13	2.6	0.95	1.3	0.1	<0.01	0.03	10
97MOB0067	97MITE-9	394512	6906204	15	0.04	0.21	0.6	<10	<0.5	0.06	0.18	<0.1	1	12	2.2	0.91	1.1	0.1	<0.01	0.02	10
97MOB0068	97MITE-9	394512	6906204	15	0.04	0.22	0.6	<10	<0.5	0.06	0.21	<0.1	1	12	2.4	1.00	1.2	0.2	<0.01	0.03	10
97MOB0069	97MITE-9	394512	6906204	15	0.06	0.21	0.6	<10	<0.5	0.06	0.19	<0.1	1	12	2.2	0.98	1.1	0.1	<0.01	0.02	10
97MOB0070	97MITE-9	394512	6906204	15	0.04	0.23	0.6	<10	<0.5	0.06	0.20	<0.1	1	12	2.4	0.90	1.1	0.1	<0.01	0.03	10
97MOB0074	97MITE-10	395217	6905369	15	0.04	0.59	0.6	30	<0.5	0.06	0.24	<0.1	3	23	6.6	1.24	2.3	0.1	<0.01	0.12	10
97MOB0075	97MITE-10	395217	6905369	15	0.04	0.48	0.8	20	<0.5	0.06	0.24	<0.1	2	19	6.0	1.21	2.0	0.1	<0.01	0.09	10
97MOB0076	97MITE-10	395217	6905369	15	0.04	0.33	0.6	10	<0.5	0.06	0.22	<0.1	1	15	3.6	1.10	1.5	0.1	<0.01	0.06	10
97MOB0077	97MITE-10	395217	6905369	15	0.04	0.35	0.6	10	<0.5	0.06	0.23	<0.1	2	16	4.6	1.12	1.5	0.1	<0.01	0.06	10
97MOB0078	97MITE-10	395217	6905369	15	0.06	0.27	0.4	10	<0.5	0.06	0.22	<0.1	1	14	3.2	1.04	1.3	0.1	<0.01	0.04	10
97MOB0079	97MITE-10	395217	6905369	15	0.04	0.24	0.4	10	<0.5	0.06	0.20	<0.1	<1	12	2.8	0.90	1.1	0.1	<0.01	0.03	10
97MOB0080	97MITE-10	395217	6905369	15	0.04	0.27	0.6	10	<0.5	0.06	0.22	<0.1	1	12	3.0	0.90	1.2	0.1	<0.01	0.04	10

Appendix XVIIIc: Chemical Fractionation in Till (<63 µm)
by ICP-MS/ICP-AES, Leach 2 of 2: Aqua Regia

Sample	Station ID	Easting	Northing	UTM	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Te ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
97MOB0005	97MITE-2	389326	6912075	15	0.52	150	0.2	0.04	14	140	2	<0.1	3	47	<0.1	0.10	0.4	0.95	25	0.45	28
97MOB0006	97MITE-2	389326	6912075	15	0.60	165	0.2	0.04	16	140	8	<0.1	4	54	<0.1	0.11	0.4	0.95	27	0.45	34
97MOB0007	97MITE-2	389326	6912075	15	0.60	170	0.2	0.04	17	150	2	<0.1	4	55	<0.1	0.11	0.4	0.95	27	0.40	34
97MOB0008	97MITE-2	389326	6912075	15	0.53	160	0.2	0.04	16	130	2	<0.1	3	51	<0.1	0.11	0.4	0.95	26	0.45	30
97MOB0009	97MITE-2	389326	6912075	15	0.46	145	0.4	0.04	14	140	4	<0.1	3	48	<0.1	0.11	0.3	0.85	24	0.40	26
97MOB0010	97MITE-2	389326	6912075	15	0.33	115	0.2	0.03	9	150	6	<0.1	2	40	<0.1	0.10	0.1	0.75	21	0.40	20
97MOB0011	97MITE-2	389326	6912075	15	0.16	80	0.2	0.02	8	100	4	<0.1	1	33	<0.1	0.09	<0.1	0.65	18	0.45	10
97MOB0015	97MITE-3	390102	6911081	15	0.15	70	0.2	0.01	5	100	6	<0.1	1	27	<0.1	0.08	<0.1	0.60	17	0.30	10
97MOB0016	97MITE-3	390102	6911081	15	0.14	70	0.2	0.01	5	90	<2	<0.1	1	28	<0.1	0.08	<0.1	0.55	17	0.55	10
97MOB0017	97MITE-3	390102	6911081	15	0.15	70	0.2	0.01	6	100	4	<0.1	1	27	<0.1	0.08	<0.1	0.55	17	0.30	10
97MOB0018	97MITE-3	390102	6911081	15	0.14	70	0.2	0.01	4	150	<2	<0.1	1	29	<0.1	0.08	<0.1	0.60	17	0.35	8
97MOB0019	97MITE-3	390102	6911081	15	0.09	60	0.2	0.01	4	130	6	<0.1	1	26	<0.1	0.07	<0.1	0.60	16	0.55	6
97MOB0066	97MITE-9	394512	6906204	15	0.13	65	0.2	0.01	4	120	2	<0.1	1	25	<0.1	0.07	<0.1	0.60	15	0.55	8
97MOB0067	97MITE-9	394512	6906204	15	0.10	55	<0.2	0.01	3	190	2	<0.1	1	24	<0.1	0.06	<0.1	0.60	15	0.40	6
97MOB0068	97MITE-9	394512	6906204	15	0.10	60	0.2	0.01	4	150	4	<0.1	1	27	<0.1	0.08	<0.1	0.65	16	0.40	6
97MOB0069	97MITE-9	394512	6906204	15	0.09	60	0.2	0.01	4	110	2	<0.1	1	28	<0.1	0.08	<0.1	0.65	16	0.45	6
97MOB0070	97MITE-9	394512	6906204	15	0.10	60	0.2	0.01	3	150	4	<0.1	1	27	<0.1	0.07	<0.1	0.55	14	0.30	6
97MOB0074	97MITE-10	395217	6905369	15	0.24	95	0.2	0.03	9	80	2	<0.1	2	33	<0.1	0.10	0.1	0.60	20	0.35	14
97MOB0075	97MITE-10	395217	6905369	15	0.20	85	0.2	0.02	7	120	4	<0.1	1	33	<0.1	0.09	0.1	0.65	20	0.40	12
97MOB0076	97MITE-10	395217	6905369	15	0.14	70	<0.2	0.02	5	100	2	<0.1	1	28	<0.1	0.08	<0.1	0.70	18	0.40	10
97MOB0077	97MITE-10	395217	6905369	15	0.15	70	0.2	0.02	5	190	2	<0.1	1	29	<0.1	0.08	<0.1	0.65	18	0.45	10
97MOB0078	97MITE-10	395217	6905369	15	0.12	65	<0.2	0.01	5	110	2	<0.1	1	28	<0.1	0.08	<0.1	0.60	17	0.40	8
97MOB0079	97MITE-10	395217	6905369	15	0.10	60	<0.2	0.01	4	120	<2	<0.1	1	26	<0.1	0.08	<0.1	0.60	15	0.30	8
97MOB0080	97MITE-10	395217	6905369	15	0.12	65	<0.2	0.01	4	140	2	<0.1	1	29	<0.1	0.08	<0.1	0.60	15	0.55	8

Appendix XVIII
Chemical Fractionation Studies
Part D: Till, <2 mm fraction

Note:

Hot Hydroxylamine Hydrochloride (not in sequence)

Analytical extraction: 0.25M $NH_2OH.HCl$ in 0.25M HCl for 2 hours at 60°C, 1 g in 20 ml solution, pH = 10

Analytical Method: inductively coupled plasma mass spectrometry

Laboratory: Chemex Ltd.

Detection Limits:

Element	DL	Element	DL	Element	DL
Ag (ppm)	0.002	Ga (ppm)	0.05	Pr (ppm)	0.005
Al (ppm)	1	Gd (ppm)	0.005	Rb (ppm)	0.01
As (ppm)	0.1	Ge (ppm)	0.1	Re (ppm)	0.001
Au (ppm)	0.05	Hf (ppm)	0.01	Sb (ppm)	0.005
B (ppm)	2			Se (ppm)	0.5
Ba (ppm)	0.05	Ho (ppm)	0.005	Sm (ppm)	0.005
Be (ppm)	0.05	I (ppm)	0.1	Sn (ppm)	0.05
Bi (ppm)	0.005	In (ppm)	0.005	Sr (ppm)	0.05
Br (ppm)	2	K (ppm)	5	Ta (ppm)	0.01
Ca (ppm)	10	La (ppm)	0.005	Tb (ppm)	0.005
Cd (ppm)	0.01	Li (ppm)	0.05	Te (ppm)	0.05
Ce (ppm)	0.005	Lu (ppm)	0.005	Th (ppm)	0.01
		Mg (ppm)	1	Ti (ppm)	1
Co (ppm)	0.05	Mn (ppm)	0.1	Tl (ppm)	0.005
Cr (ppm)	0.05	Mo (ppm)	0.01	Tm (ppm)	0.005
Cs (ppm)	0.005	Na (ppm)	10	U (ppm)	0.005
Cu (ppm)	0.05	Nb (ppm)	0.01	V (ppm)	0.05
Dy (ppm)	0.005	Nd (ppm)	0.005	W (ppm)	0.01
Er (ppm)	0.005	Ni (ppm)	0.05	Y (ppm)	0.005
Eu (ppm)	0.005	P (ppm)	5	Yb (ppm)	0.005
Fe (ppm)	5	Pb (ppm)	0.1	Zn (ppm)	0.2
				Zr (ppm)	0.05

Appendix XVIIId: Chemical Fractionation in Till (<2 mm) by ICP-MS, Hot Hydroxylamine Hydrochloride (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Co ppm	Cr ppm	Cs ppm
99MOB2007	MOB990167	402005	6914817	15	0.030	1545	0.7	<0.05	<2	39.90	0.10	0.065	2	1840	0.03	33.200	1.05	2.85	0.190
99MOB2008	MOB990167	402005	6914817	15	0.020	1705	1.0	<0.05	<2	33.30	0.15	0.115	<2	1520	0.01	28.900	1.20	5.85	0.240
99MOB2009	MOB990167	402005	6914817	15	0.026	1660	0.7	<0.05	<2	35.90	0.15	0.060	<2	1630	<0.01	27.200	1.05	3.55	0.210
99MOB2010	MOB990167	402005	6914817	15	0.018	1575	0.7	<0.05	<2	30.20	0.15	0.050	<2	1440	0.01	20.600	0.95	3.25	0.195
99MOB2011	MOB990167	402005	6914817	15	0.020	1660	1.0	<0.05	<2	34.60	0.10	0.065	<2	1520	0.01	26.000	1.20	3.80	0.225
99MOB2012	MOB990167	402005	6914817	15	0.020	1450	1.1	<0.05	<2	28.90	0.10	0.050	<2	1430	<0.01	25.400	1.05	3.80	0.225
99MOB2029	MOB990175	349732	6884943	15	0.022	1920	0.6	<0.05	<2	27.30	0.10	0.065	<2	1370	0.01	22.400	2.85	3.90	0.305
99MOB2030	MOB990175	349732	6884943	15	0.040	1990	0.7	<0.05	<2	27.50	0.15	0.060	<2	1460	0.01	20.800	2.65	4.10	0.290
99MOB2031	MOB990175	349732	6884943	15	0.026	2030	0.7	<0.05	<2	28.80	0.15	0.090	<2	1520	<0.01	20.700	2.35	4.30	0.270
99MOB2032	MOB990175	349732	6884943	15	0.020	2030	0.6	<0.05	<2	29.20	0.10	0.070	<2	1580	0.01	21.200	1.90	4.00	0.280
99MOB2033	MOB990175	349732	6884943	15	0.016	1420	0.4	<0.05	<2	21.60	0.05	0.055	<2	1450	0.01	21.100	1.55	3.05	0.190
99MOB2048	MOB990182	421700	6935690	15	0.016	1210	0.4	<0.05	<2	30.20	0.05	0.025	<2	1250	0.02	18.000	1.05	2.15	0.210
99MOB2049	MOB990182	421700	6935690	15	0.012	1340	0.5	<0.05	<2	27.90	0.05	0.035	<2	1300	<0.01	18.350	1.45	2.65	0.215
99MOB2050	MOB990182	421700	6935690	15	0.016	1440	0.7	<0.05	<2	32.10	0.05	0.040	<2	1390	0.01	18.850	1.45	2.50	0.235
99MOB2051	MOB990182	421700	6935690	15	0.016	1385	0.7	<0.05	<2	30.20	0.05	0.040	<2	1330	0.02	18.650	1.50	2.75	0.220
99MOB2052	MOB990182	421700	6935690	15	0.016	1560	0.5	<0.05	<2	33.10	0.05	0.060	<2	1370	0.01	22.700	1.50	3.65	0.225
99MOB2053	MOB990182	421700	6935690	15	0.018	1660	0.6	<0.05	<2	31.40	0.05	0.040	<2	1360	0.01	24.600	1.40	3.70	0.215
99MOB2054	MOB990182	421700	6935690	15	0.016	1765	0.7	<0.05	<2	35.70	0.10	0.045	<2	1470	0.01	25.900	1.65	3.85	0.230

Appendix XVIIId: Chemical Fractionation in Till (<2 mm)
by ICP-MS, Hot Hydroxylamine Hydrochloride (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm	Ho ppm	I ppm	In ppm	K ppm	La ppm	Li ppm
99MOB2007	MOB990167	402005	6914817	15	5.10	0.745	0.330	0.270	2060	0.50	1.360	<0.1	0.01	0.110	3.7	<0.005	400	16.900	1.75
99MOB2008	MOB990167	402005	6914817	15	3.65	0.800	0.340	0.280	4090	0.70	1.410	<0.1	0.01	0.115	1.8	<0.005	390	14.450	2.60
99MOB2009	MOB990167	402005	6914817	15	4.20	0.725	0.330	0.270	2620	0.65	1.335	<0.1	0.01	0.110	2.2	<0.005	395	13.150	2.35
99MOB2010	MOB990167	402005	6914817	15	3.15	0.585	0.275	0.210	2580	0.60	1.140	<0.1	<0.01	0.095	1.7	<0.005	410	10.400	2.30
99MOB2011	MOB990167	402005	6914817	15	4.15	0.715	0.305	0.250	2810	0.70	1.335	<0.1	0.01	0.110	2.2	<0.005	420	12.700	2.65
99MOB2012	MOB990167	402005	6914817	15	3.15	0.700	0.310	0.240	2720	0.60	1.265	<0.1	<0.01	0.115	1.4	<0.005	395	12.600	2.40
99MOB2029	MOB990175	349732	6884943	15	8.05	0.640	0.265	0.190	2270	0.75	1.100	<0.1	0.01	0.105	0.5	<0.005	445	8.570	3.15
99MOB2030	MOB990175	349732	6884943	15	7.15	0.630	0.290	0.225	2280	0.75	1.155	<0.1	0.01	0.100	0.5	<0.005	490	8.560	3.30
99MOB2031	MOB990175	349732	6884943	15	7.30	0.675	0.275	0.205	2250	0.75	1.145	<0.1	0.01	0.105	0.4	<0.005	500	9.090	2.75
99MOB2032	MOB990175	349732	6884943	15	6.10	0.740	0.320	0.220	2190	0.75	1.230	<0.1	<0.01	0.115	0.5	<0.005	435	9.550	2.85
99MOB2033	MOB990175	349732	6884943	15	5.00	0.705	0.320	0.225	1555	0.50	1.295	<0.1	<0.01	0.115	0.4	<0.005	270	9.910	1.95
99MOB2048	MOB990182	421700	6935690	15	3.10	0.455	0.195	0.170	1265	0.45	0.795	<0.1	0.01	0.065	0.5	<0.005	385	8.430	1.50
99MOB2049	MOB990182	421700	6935690	15	3.20	0.455	0.205	0.170	1480	0.50	0.850	<0.1	0.01	0.075	0.3	<0.005	370	8.320	1.90
99MOB2050	MOB990182	421700	6935690	15	5.65	0.485	0.230	0.185	1490	0.55	0.900	<0.1	0.01	0.080	0.4	<0.005	420	8.550	1.90
99MOB2051	MOB990182	421700	6935690	15	3.25	0.485	0.230	0.180	1460	0.50	0.890	<0.1	0.01	0.075	0.6	<0.005	380	8.600	1.80
99MOB2052	MOB990182	421700	6935690	15	3.45	0.555	0.245	0.205	1785	0.65	1.050	<0.1	0.01	0.085	0.5	<0.005	395	10.600	2.25
99MOB2053	MOB990182	421700	6935690	15	3.55	0.545	0.250	0.210	2200	0.70	1.055	<0.1	0.01	0.090	0.6	<0.005	400	11.650	2.35
99MOB2054	MOB990182	421700	6935690	15	4.55	0.630	0.275	0.235	2320	0.70	1.170	<0.1	0.01	0.090	1.1	<0.005	445	12.500	2.75

Appendix XVIIId: Chemical Fractionation in Till (<2 mm)
by ICP-MS, Hot Hydroxylamine Hydrochloride (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Nd ppm	Ni ppm	P ppm	Pb ppm	Pr ppm	Rb ppm	Re ppm	Sb ppm	Se ppm	Sm ppm
99MOB2007	MOB990167	402005	6914817	15	0.035	653	32.5	0.04	90	0.05	12.200	2.90	330	5.8	3.540	2.95	<0.001	0.015	<0.5	1.770
99MOB2008	MOB990167	402005	6914817	15	0.040	835	27.5	0.04	90	0.08	11.200	3.20	500	3.9	3.190	3.48	<0.001	0.010	<0.5	1.695
99MOB2009	MOB990167	402005	6914817	15	0.035	736	22.8	0.04	90	0.06	10.350	2.50	510	3.5	2.950	3.55	<0.001	0.005	<0.5	1.745
99MOB2010	MOB990167	402005	6914817	15	0.030	710	22.9	0.05	100	0.06	8.350	2.20	485	3.1	2.290	3.23	<0.001	0.005	<0.5	1.305
99MOB2011	MOB990167	402005	6914817	15	0.030	757	26.7	0.04	100	0.06	10.300	2.55	530	3.7	2.920	3.64	<0.001	0.005	<0.5	1.565
99MOB2012	MOB990167	402005	6914817	15	0.025	703	25.2	0.05	90	0.07	9.880	2.45	560	3.6	2.800	3.38	<0.001	0.005	<0.5	1.540
99MOB2029	MOB990175	349732	6884943	15	0.030	820	71.9	0.03	140	0.10	7.690	3.75	550	3.9	2.040	4.17	<0.001	<0.005	<0.5	1.260
99MOB2030	MOB990175	349732	6884943	15	0.030	838	58.0	0.01	160	0.10	7.820	3.45	585	3.9	2.040	4.17	<0.001	<0.005	<0.5	1.290
99MOB2031	MOB990175	349732	6884943	15	0.030	868	50.7	0.02	180	0.09	8.010	3.60	605	3.7	2.140	4.13	<0.001	<0.005	<0.5	1.340
99MOB2032	MOB990175	349732	6884943	15	0.030	833	42.4	<0.01	160	0.10	8.520	3.25	625	4.0	2.330	3.67	<0.001	<0.005	<0.5	1.450
99MOB2033	MOB990175	349732	6884943	15	0.030	578	33.5	0.01	90	0.09	8.670	2.35	610	3.2	2.400	2.68	<0.001	<0.005	<0.5	1.505
99MOB2048	MOB990182	421700	6935690	15	0.020	515	27.5	0.02	140	0.07	6.360	2.05	495	2.8	1.765	3.06	<0.001	0.005	<0.5	0.965
99MOB2049	MOB990182	421700	6935690	15	0.020	614	34.1	0.01	130	0.07	6.550	2.40	515	2.7	1.830	3.11	<0.001	<0.005	<0.5	0.985
99MOB2050	MOB990182	421700	6935690	15	0.020	609	32.7	0.01	160	0.07	6.930	2.50	560	3.0	1.900	3.34	<0.001	0.010	<0.5	1.105
99MOB2051	MOB990182	421700	6935690	15	0.020	577	31.6	0.01	140	0.06	6.740	2.35	555	2.8	1.920	3.18	<0.001	<0.005	<0.5	1.095
99MOB2052	MOB990182	421700	6935690	15	0.025	728	36.5	0.01	140	0.08	7.980	2.70	525	3.0	2.290	3.34	<0.001	<0.005	<0.5	1.255
99MOB2053	MOB990182	421700	6935690	15	0.025	750	38.7	0.01	150	0.08	8.690	2.80	540	2.8	2.490	3.33	<0.001	0.005	<0.5	1.375
99MOB2054	MOB990182	421700	6935690	15	0.025	787	40.9	0.01	170	0.07	9.350	3.35	540	3.4	2.710	3.79	<0.001	0.005	<0.5	1.485

Appendix XVIIId: Chemical Fractionation in Till (<2 mm)
by ICP-MS, Hot Hydroxylamine Hydrochloride (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
99MOB2007	MOB990167	402005	6914817	15	<0.05	14.45	<0.01	0.170	<0.05	0.24	25	0.035	0.035	1.120	4.35	<0.01	2.990	0.230	5.0	0.50
99MOB2008	MOB990167	402005	6914817	15	<0.05	11.95	<0.01	0.175	<0.05	0.35	48	0.065	0.040	0.660	7.90	0.01	3.060	0.250	5.0	0.95
99MOB2009	MOB990167	402005	6914817	15	<0.05	11.95	<0.01	0.165	<0.05	0.16	40	0.035	0.040	0.660	6.15	0.03	3.010	0.245	4.6	0.45
99MOB2010	MOB990167	402005	6914817	15	<0.05	11.00	<0.01	0.135	<0.05	0.13	46	0.035	0.030	0.485	5.75	0.01	2.490	0.175	4.4	0.35
99MOB2011	MOB990167	402005	6914817	15	<0.05	12.45	<0.01	0.160	<0.05	0.15	50	0.040	0.035	0.600	6.75	0.01	2.990	0.225	5.0	0.45
99MOB2012	MOB990167	402005	6914817	15	<0.05	11.30	<0.01	0.160	<0.05	0.24	54	0.035	0.035	0.525	6.30	0.02	2.820	0.220	4.6	0.45
99MOB2029	MOB990175	349732	6884943	15	<0.05	12.70	<0.01	0.140	<0.05	0.20	69	0.045	0.035	0.335	4.25	0.01	2.720	0.195	8.4	0.75
99MOB2030	MOB990175	349732	6884943	15	<0.05	13.30	<0.01	0.140	<0.05	0.21	69	0.050	0.035	0.350	4.40	0.02	2.780	0.205	7.0	0.80
99MOB2031	MOB990175	349732	6884943	15	<0.05	14.40	<0.01	0.130	<0.05	0.26	71	0.045	0.035	0.345	4.30	0.01	2.850	0.220	7.0	0.85
99MOB2032	MOB990175	349732	6884943	15	<0.05	13.90	<0.01	0.155	<0.05	0.11	73	0.045	0.040	0.370	4.50	0.01	3.040	0.220	6.0	0.50
99MOB2033	MOB990175	349732	6884943	15	<0.05	11.65	<0.01	0.155	<0.05	0.09	62	0.025	0.040	0.320	3.45	0.02	3.190	0.225	4.8	0.30
99MOB2048	MOB990182	421700	6935690	15	<0.05	9.25	<0.01	0.095	<0.05	0.91	50	0.075	0.020	0.255	2.60	0.03	1.850	0.135	3.6	0.80
99MOB2049	MOB990182	421700	6935690	15	<0.05	8.90	<0.01	0.105	<0.05	0.72	55	0.035	0.020	0.235	3.05	0.02	1.875	0.145	5.0	0.60
99MOB2050	MOB990182	421700	6935690	15	<0.05	10.40	<0.01	0.105	<0.05	0.71	54	0.040	0.025	0.270	3.20	0.02	2.060	0.155	6.8	0.75
99MOB2051	MOB990182	421700	6935690	15	<0.05	10.20	<0.01	0.100	<0.05	0.68	57	0.040	0.025	0.265	3.35	0.01	2.080	0.145	4.0	0.75
99MOB2052	MOB990182	421700	6935690	15	<0.05	10.20	<0.01	0.115	<0.05	0.56	70	0.040	0.025	0.290	4.10	0.01	2.210	0.165	5.0	0.55
99MOB2053	MOB990182	421700	6935690	15	<0.05	10.10	<0.01	0.135	<0.05	0.30	72	0.035	0.030	0.315	4.95	0.01	2.400	0.180	5.0	0.55
99MOB2054	MOB990182	421700	6935690	15	<0.05	11.20	<0.01	0.145	<0.05	0.25	77	0.040	0.030	0.365	5.25	0.01	2.600	0.200	7.4	0.50

Appendix XVIII
Chemical Fractionation Studies
Part E: Peat

Note:
Sodium Pyrophosphate (not in sequence)
Analytical extraction: 0.1M $Na_4P_2O_7$ for 1 hour, 1 g in 25 ml solution, pH = 10
Analytical Method: inductively coupled plasma mass spectrometry
Laboratory: Chemex Ltd.

Detection Limits:

Element	DL	Element	DL	Element	DL
Ag (ppm)	0.002	Ga (ppm)	0.05	Pr (ppm)	0.005
Al (ppm)	1	Gd (ppm)	0.005	Rb (ppm)	0.01
As (ppm)	0.1	Ge (ppm)	0.1	Re (ppm)	0.001
Au (ppm)	0.05	Hf (ppm)	0.01	Sb (ppm)	0.005
B (ppm)	2	Hg (ppm)	0.1	Se (ppm)	0.5
Ba (ppm)	0.05	Ho (ppm)	0.005	Sm (ppm)	0.005
Be (ppm)	0.05	I (ppm)	0.1	Sn (ppm)	0.05
Bi (ppm)	0.005	In (ppm)	0.005	Sr (ppm)	0.05
Br (ppm)	2	K (ppm)	5	Ta (ppm)	0.01
Ca (ppm)	10	La (ppm)	0.005	Tb (ppm)	0.005
Cd (ppm)	0.01	Li (ppm)	0.05	Te (ppm)	0.05
Ce (ppm)	0.005	Lu (ppm)	0.005	Th (ppm)	0.01
		Mg (ppm)	1	Ti (ppm)	1
Co (ppm)	0.05	Mn (ppm)	0.1	Tl (ppm)	0.005
Cr (ppm)	0.05	Mo (ppm)	0.01	Tm (ppm)	0.005
Cs (ppm)	0.005			U (ppm)	0.005
Cu (ppm)	0.05	Nb (ppm)	0.01	V (ppm)	0.05
Dy (ppm)	0.005	Nd (ppm)	0.005	W (ppm)	0.01
Er (ppm)	0.005	Ni (ppm)	0.05	Y (ppm)	0.005
Eu (ppm)	0.005			Yb (ppm)	0.005
Fe (ppm)	5	Pb (ppm)	0.1	Zn (ppm)	0.2
				Zr (ppm)	0.05

Appendix XVIIIe: Chemical Fractionation in Peat
by ICP-MS, Sodium Pyrophosphate (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Al ppm	As ppm	Au ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Br ppm	Ca ppm	Cd ppm	Ce ppm	Co ppm
99MOB2056	MOB990186	377190	6901086	15	0.006	93	<0.1	<0.05	<2	30.00	<0.05	<0.005	<2	5220	0.14	0.875	0.25
99MOB2057	MOB990186	377190	6901086	15	0.006	112	<0.1	<0.05	<2	18.30	<0.05	0.005	2	4800	0.21	0.795	0.60
99MOB2058	MOB990186	377190	6901086	15	0.006	666	0.1	<0.05	<2	41.90	0.10	<0.005	6	4080	0.16	6.720	2.45
99MOB2059	MOB990186	377190	6901086	15	0.006	527	0.3	<0.05	<2	25.80	0.05	0.005	4	5170	0.47	7.180	1.50
99MOB2060	MOB990186	377190	6901086	15	0.012	1870	0.3	<0.05	<2	103.50	0.25	0.010	10	7760	0.12	40.100	2.45
99MOB2061	MOB990187	377719	6905809	15	0.012	315	<0.1	<0.05	<2	2.60	<0.05	<0.005	4	820	0.18	0.710	0.20
99MOB2062	MOB990187	377719	6905809	15	0.014	1065	0.2	<0.05	<2	6.15	0.05	<0.005	10	1140	0.24	3.140	0.45
99MOB2063	MOB990187	377719	6905809	15	<0.002	1210	0.1	<0.05	<2	16.10	0.10	<0.005	8	1200	0.08	5.610	0.25
99MOB2064	MOB990189	377381	6914460	15	0.002	352	0.1	<0.05	<2	23.10	0.05	<0.005	4	3190	0.30	2.270	0.80
99MOB2065	MOB990189	377381	6914460	15	0.006	1985	1.4	<0.05	<2	83.30	0.20	0.015	30	5200	0.29	18.250	1.25
99MOB2066	MOB990190	382543	6910120	15	0.006	29	<0.1	<0.05	<2	4.35	<0.05	<0.005	2	760	0.09	0.320	0.10
99MOB2067	MOB990190	382543	6910120	15	<0.002	136	<0.1	<0.05	<2	3.65	<0.05	<0.005	<2	1380	0.06	0.795	0.45
99MOB2068	MOB990190	382543	6910120	15	0.018	2100	0.9	<0.05	<2	47.10	0.15	0.015	18	2890	0.12	27.000	1.55
99MOB2069	MOB990190	382543	6910120	15	0.030	3210	2.1	<0.05	<2	54.60	0.25	0.045	36	1610	0.08	34.000	0.80
99MOB2070	MOB990192	387667	6911517	15	<0.002	316	0.5	<0.05	<2	14.25	<0.05	<0.005	8	2520	0.20	3.210	1.05
99MOB2071	MOB990192	387667	6911517	15	0.008	2070	6.9	<0.05	<2	39.80	0.15	0.040	44	2010	0.15	45.600	1.55
99MOB2072	MOB990192	387667	6911517	15	0.028	2950	7.6	<0.05	<2	26.50	0.25	0.055	20	1390	0.11	50.200	0.80

Appendix XVIIIe: Chemical Fractionation in Peat
by ICP-MS, Sodium Pyrophosphate (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Cr ppm	Cs ppm	Cu ppm	Dy ppm	Er ppm	Eu ppm	Fe ppm	Ga ppm	Gd ppm	Ge ppm	Hf ppm	Hg ppm	Ho ppm
99MOB2056	MOB990186	377190	6901086	15	<0.05	0.005	0.45	0.030	0.005	0.005	90	<0.05	0.055	<0.1	<0.01	<0.1	0.005
99MOB2057	MOB990186	377190	6901086	15	<0.05	0.005	0.65	0.020	0.015	0.005	170	<0.05	0.045	<0.1	<0.01	<0.1	0.005
99MOB2058	MOB990186	377190	6901086	15	0.20	0.005	0.85	0.190	0.095	0.080	1275	<0.05	0.370	<0.1	0.03	<0.1	0.035
99MOB2059	MOB990186	377190	6901086	15	0.25	0.005	0.80	0.165	0.100	0.085	1175	<0.05	0.380	<0.1	0.03	<0.1	0.035
99MOB2060	MOB990186	377190	6901086	15	1.10	0.005	1.80	1.145	0.570	0.475	4610	0.15	2.110	<0.1	0.07	<0.1	0.210
99MOB2061	MOB990187	377719	6905809	15	0.05	0.005	0.35	0.025	0.020	0.005	100	<0.05	0.040	<0.1	<0.01	<0.1	<0.005
99MOB2062	MOB990187	377719	6905809	15	0.30	0.005	0.80	0.080	0.050	0.030	1110	<0.05	0.135	<0.1	0.03	<0.1	0.020
99MOB2063	MOB990187	377719	6905809	15	0.65	0.010	1.45	0.150	0.055	0.060	2640	<0.05	0.275	<0.1	0.05	<0.1	0.025
99MOB2064	MOB990189	377381	6914460	15	0.05	0.040	0.75	0.075	0.040	0.020	1020	<0.05	0.145	<0.1	<0.01	<0.1	0.015
99MOB2065	MOB990189	377381	6914460	15	1.10	<0.005	0.95	0.625	0.360	0.260	12590	0.05	1.145	<0.1	0.05	<0.1	0.130
99MOB2066	MOB990190	382543	6910120	15	<0.05	0.005	0.15	0.010	0.005	<0.005	10	<0.05	0.020	<0.1	<0.01	<0.1	<0.005
99MOB2067	MOB990190	382543	6910120	15	0.05	0.005	0.40	0.035	0.015	0.005	205	<0.05	0.045	<0.1	<0.01	<0.1	<0.005
99MOB2068	MOB990190	382543	6910120	15	1.05	<0.005	1.45	0.635	0.330	0.285	3720	0.15	1.205	<0.1	0.07	<0.1	0.130
99MOB2069	MOB990190	382543	6910120	15	4.85	0.015	2.85	0.770	0.345	0.320	7280	0.30	1.395	<0.1	0.12	<0.1	0.135
99MOB2070	MOB990192	387667	6911517	15	0.10	0.015	0.65	0.125	0.060	0.040	1805	<0.05	0.195	<0.1	<0.01	<0.1	0.020
99MOB2071	MOB990192	387667	6911517	15	2.30	0.005	1.95	1.170	0.545	0.470	16430	0.20	2.230	<0.1	0.08	0.1	0.215
99MOB2072	MOB990192	387667	6911517	15	3.20	<0.005	3.25	1.325	0.630	0.565	12250	0.20	2.580	<0.1	0.14	<0.1	0.230

Appendix XVIIIe: Chemical Fractionation in Peat
by ICP-MS, Sodium Pyrophosphate (not in sequence)

Sample	Station ID	Easting	Northing	UTM	I ppm	In ppm	K ppm	La ppm	Li ppm	Lu ppm	Mg ppm	Mn ppm	Mo ppm	Na ppm	Nb ppm	Nd ppm	Ni ppm
99MOB2056	MOB990186	377190	6901086	15	0.3	<0.005	770	0.430	<0.05	<0.005	909	29.9	0.18	------	<0.01	0.325	<0.05
99MOB2057	MOB990186	377190	6901086	15	0.4	<0.005	610	0.380	<0.05	<0.005	1010	19.1	0.21	------	<0.01	0.325	0.15
99MOB2058	MOB990186	377190	6901086	15	1.5	<0.005	450	3.260	0.10	0.015	853	1.4	1.16	------	0.07	2.810	0.75
99MOB2059	MOB990186	377190	6901086	15	1.4	<0.005	415	3.320	0.05	0.005	685	2.0	0.95	------	0.08	2.720	0.50
99MOB2060	MOB990186	377190	6901086	15	7.1	<0.005	115	18.100	0.05	0.075	782	0.8	0.54	------	0.19	16.450	2.35
99MOB2061	MOB990187	377719	6905809	15	0.8	<0.005	335	0.315	0.05	<0.005	852	1.8	0.06	------	<0.01	0.320	0.35
99MOB2062	MOB990187	377719	6905809	15	3.0	<0.005	265	1.530	0.05	0.005	385	0.9	0.10	------	0.06	1.240	0.30
99MOB2063	MOB990187	377719	6905809	15	3.3	<0.005	135	3.080	0.05	0.005	52	0.7	0.04	------	0.12	2.140	0.60
99MOB2064	MOB990189	377381	6914460	15	2.2	<0.005	665	0.975	<0.05	0.005	831	4.2	0.86	------	0.01	1.060	0.25
99MOB2065	MOB990189	377381	6914460	15	31.7	<0.005	305	8.150	<0.05	0.050	433	3.2	2.00	------	0.20	7.980	1.60
99MOB2066	MOB990190	382543	6910120	15	1.1	<0.005	755	0.145	0.10	<0.005	742	11.1	1.21	------	<0.01	0.165	0.05
99MOB2067	MOB990190	382543	6910120	15	1.8	<0.005	680	0.345	0.10	<0.005	833	9.1	1.33	------	<0.01	0.350	0.25
99MOB2068	MOB990190	382543	6910120	15	24.5	<0.005	485	12.400	0.10	0.040	840	7.7	3.58	------	0.17	10.400	1.40
99MOB2069	MOB990190	382543	6910120	15	40.2	0.005	160	16.250	0.65	0.045	331	2.1	0.52	------	0.50	12.450	1.95
99MOB2070	MOB990192	387667	6911517	15	3.2	<0.005	505	1.320	0.10	0.010	464	6.9	0.52	------	0.01	1.590	0.70
99MOB2071	MOB990192	387667	6911517	15	27.5	<0.005	345	20.500	0.05	0.080	174	2.0	0.70	------	0.37	19.150	2.00
99MOB2072	MOB990192	387667	6911517	15	11.8	<0.005	235	22.600	0.05	0.055	134	1.2	0.24	------	0.82	21.300	1.55

Appendix XVIIIe. Chemical Fractionation in Peat
by ICP-MS, Sodium Pyrophosphate (not in sequence)

Sample	Station ID	Easting	Northing	UTM	P ppm	Pb ppm	Pr ppm	Rb ppm	Re ppm	Sb ppm	Se ppm	Sm ppm	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Te ppm
99MOB2056	MOB990186	377190	6901086	15	-----	1.4	0.105	1.11	<0.001	<0.005	<0.5	0.115	<0.05	11.30	<0.01	0.005	<0.05
99MOB2057	MOB990186	377190	6901086	15	-----	1.5	0.085	1.17	<0.001	<0.005	<0.5	0.095	<0.05	13.20	<0.01	0.005	<0.05
99MOB2058	MOB990186	377190	6901086	15	-----	1.1	0.755	1.30	<0.001	<0.005	<0.5	0.515	<0.05	35.50	<0.01	0.045	<0.05
99MOB2059	MOB990186	377190	6901086	15	-----	1.5	0.765	0.95	<0.001	<0.005	<0.5	0.490	<0.05	26.90	<0.01	0.040	<0.05
99MOB2060	MOB990186	377190	6901086	15	-----	1.5	4.450	0.33	<0.001	0.005	<0.5	2.840	<0.05	45.30	0.01	0.255	<0.05
99MOB2061	MOB990187	377719	6905809	15	-----	0.2	0.090	1.14	<0.001	<0.005	<0.5	0.050	<0.05	8.20	<0.01	0.005	<0.05
99MOB2062	MOB990187	377719	6905809	15	-----	0.5	0.350	0.88	<0.001	<0.005	<0.5	0.255	<0.05	10.30	<0.01	0.020	<0.05
99MOB2063	MOB990187	377719	6905809	15	-----	0.5	0.600	0.37	<0.001	<0.005	<0.5	0.365	0.05	6.40	<0.01	0.035	<0.05
99MOB2064	MOB990189	377381	6914460	15	-----	2.2	0.265	3.59	<0.001	<0.005	<0.5	0.205	<0.05	21.70	<0.01	0.015	<0.05
99MOB2065	MOB990189	377381	6914460	15	-----	1.7	2.180	1.11	<0.001	0.005	<0.5	1.550	<0.05	38.70	0.01	0.130	<0.05
99MOB2066	MOB990190	382543	6910120	15	-----	0.3	0.040	0.80	<0.001	<0.005	<0.5	0.030	<0.05	3.90	<0.01	<0.005	<0.05
99MOB2067	MOB990190	382543	6910120	15	-----	0.1	0.090	0.83	<0.001	<0.005	<0.5	0.060	<0.05	7.00	<0.01	0.005	<0.05
99MOB2068	MOB990190	382543	6910120	15	-----	1.4	2.900	0.53	<0.001	0.005	<0.5	1.610	<0.05	17.40	<0.01	0.150	<0.05
99MOB2069	MOB990190	382543	6910120	15	-----	2.4	3.650	0.29	<0.001	0.015	<0.5	2.010	0.05	11.90	0.03	0.185	<0.05
99MOB2070	MOB990192	387667	6911517	15	-----	1.3	0.420	4.32	<0.001	<0.005	<0.5	0.270	<0.05	19.40	<0.01	0.025	<0.05
99MOB2071	MOB990192	387667	6911517	15	-----	0.8	5.310	2.06	<0.001	0.005	<0.5	2.990	0.05	17.40	0.01	0.280	<0.05
99MOB2072	MOB990192	387667	6911517	15	-----	0.8	5.740	1.14	<0.001	0.005	<0.5	3.530	0.15	10.50	0.03	0.305	<0.05

Appendix XVIIIe: Chemical Fractionation in Peat
by ICP-MS, Sodium Pyrophosphate (not in sequence)

Sample	Station ID	Easting	Northing	UTM	Th ppm	Ti ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
99MOB2056	MOB990186	377190	6901086	15	0.10	3	0.005	<0.005	0.030	0.05	<0.01	0.135	0.020	30.4	0.20
99MOB2057	MOB990186	377190	6901086	15	0.09	5	0.005	<0.005	0.030	0.05	<0.01	0.140	0.015	40.0	0.25
99MOB2058	MOB990186	377190	6901086	15	0.48	27	<0.005	0.015	0.205	0.75	0.01	1.130	0.100	21.6	1.05
99MOB2059	MOB990186	377190	6901086	15	0.45	27	0.010	0.015	0.140	0.50	0.01	0.965	0.095	27.4	0.95
99MOB2060	MOB990186	377190	6901086	15	1.51	67	<0.005	0.090	0.655	0.45	0.04	6.850	0.540	3.4	2.20
99MOB2061	MOB990187	377719	6905809	15	0.09	8	<0.005	<0.005	0.025	<0.05	<0.01	0.125	0.010	10.0	0.25
99MOB2062	MOB990187	377719	6905809	15	0.40	20	<0.005	0.005	0.105	0.20	<0.01	0.505	0.045	2.2	1.05
99MOB2063	MOB990187	377719	6905809	15	1.41	45	<0.005	0.005	0.570	1.10	<0.01	0.715	0.060	0.2	1.35
99MOB2064	MOB990189	377381	6914460	15	0.13	4	0.020	0.005	0.040	0.30	<0.01	0.470	0.045	28.8	0.30
99MOB2065	MOB990189	377381	6914460	15	1.29	46	0.050	0.055	0.325	2.95	0.05	3.850	0.335	6.4	1.55
99MOB2066	MOB990190	382543	6910120	15	0.05	3	<0.005	<0.005	0.005	<0.05	<0.01	0.060	0.005	19.8	0.10
99MOB2067	MOB990190	382543	6910120	15	0.12	5	<0.005	<0.005	0.020	0.15	0.01	0.190	0.020	11.8	0.25
99MOB2068	MOB990190	382543	6910120	15	2.08	59	<0.005	0.040	0.355	2.30	0.03	3.470	0.280	13.0	2.35
99MOB2069	MOB990190	382543	6910120	15	4.37	154	0.005	0.050	0.900	3.75	0.05	3.890	0.320	2.4	4.10
99MOB2070	MOB990192	387667	6911517	15	0.13	7	0.005	0.005	0.045	0.25	0.01	0.735	0.075	18.4	0.25
99MOB2071	MOB990192	387667	6911517	15	1.89	51	0.010	0.075	1.340	9.55	0.09	6.230	0.435	6.6	2.30
99MOB2072	MOB990192	387667	6911517	15	3.94	103	0.015	0.075	2.550	28.00	0.13	6.720	0.445	2.2	3.45

Appendix XIX
Water Chemistry
Part A: Cations

Note:

Sample preparation:	filtered: <0.45 µm; unfiltered: bulk; cations aliquot preserved with 0.4% HNO_3; Hg aliquot preserved with addition of BrCl to 0.5%
Analytical Method:	Direct inductively coupled plasma mass spectrometry; Hg by hydride-inductively coupled plasma mass spectrometry
Laboratory:	MRD's Analytical Development Laboratory

Detection Limits:

Element	DL	Element	DL	Element	DL
Hg (ppb) *in 1997*:	0.002	Ag (ppb)	0.05	Tl (ppb)	0.005
Hg (ppb) *in 1999*:	0.0002	Cd (ppb)	0.05	Pb (ppb)	0.01
Li (ppb)	0.1	In (ppb)	0.01	Bi (ppb)	0.01
Be (ppb)	0.005	Sb (ppb)	0.01	Th (ppb)	0.01
B (ppb)	0.5	Cs (ppb)	0.01	U (ppb)	0.005
Al (ppb)	2	Ba (ppb)	0.2		
Ti (ppb)	0.5	La (ppb)	0.01		
V (ppb)	0.1	Ce (ppb)	0.01		
Cr (ppb)	0.1	Pr (ppb)	0.005		
Fe (ppb)	5	Nd (ppb)	0.005		
Mn (ppb)	0.1	Sm (ppb)	0.005		
Co (ppb)	0.05	Eu (ppb)	0.005		
Ni (ppb)	0.2	Tb (ppb)	0.005		
Cu (ppb)	0.1	Gd (ppb)	0.005		
Zn (ppb)	0.5	Dy (ppb)	0.005		
As (ppb)	0.1	Ho (ppb)	0.005		
Se (ppb)	1	Er (ppb)	0.001		
Rb (ppb)	0.05	Tm (ppb)	0.005		
Sr (ppb)	0.5	Yb (ppb)	0.005		
Y (ppb)	0.01	Lu (ppb)	0.005		
Mo (ppb)	0.05	Re (ppb)	0.005		

Appendix XIXa: Water Chemistry
Cations

Sample	Station ID	Easting	Northing	UTM	Sample type	Hg ppb	Li ppb	Be ppb	B ppb	Al ppb	Ti ppb	V ppb	Cr ppb	Fe ppb	Mn ppb	Co ppb	Ni ppb
97-W1	97MITE-L	395439	6905273	15	filtered	0.003	0.460	< 0.005	-	3	< 0.5	< 0.1	< 0.1	< 5	0.7	< 0.05	0.2
97-W2	97MITE-M	394995	6905932	15	filtered	< 0.002	0.466	< 0.005	-	3	< 0.5	< 0.1	< 0.1	< 5	0.7	< 0.05	< 0.2
97-W3	97MITE-N	394779	6905884	15	filtered	< 0.002	0.820	< 0.005	-	7	< 0.5	< 0.1	< 0.1	72	0.8	< 0.05	< 0.2
97-W4	97MITE-O	394212	6906528	15	filtered	0.002	0.850	< 0.005	-	24	< 0.5	0.1	0.2	91	1.6	< 0.05	< 0.2
97-W5	97MITE-P	393210	6907571	15	filtered	0.003	2.764	< 0.005	-	22	< 0.5	0.2	0.2	213	5.5	0.05	0.5
97-W6	97MITE-Q	394406	6906787	15	filtered	0.002	0.499	< 0.005	-	3	< 0.5	< 0.1	< 0.1	5	1.1	< 0.05	< 0.2
97-W7	97MITE-W	379420	6909633	15	filtered	< 0.002	0.668	< 0.005	-	10	< 0.5	< 0.1	0.1	19	3.4	< 0.05	0.5
97-W8	97MITE-X	380270	6908896	15	filtered	< 0.002	0.714	< 0.005	-	11	< 0.5	0.2	0.1	24	3.5	< 0.05	0.5
97-W9	97MITE-Y	380415	6908099	15	filtered	< 0.002	0.673	< 0.005	-	12	< 0.5	< 0.1	0.1	21	2.7	< 0.05	0.5
97-W10	97MITE-H	403250	6914400	15	filtered	< 0.002	0.467	< 0.005	-	6	< 0.5	< 0.1	< 0.1	5	1.1	< 0.05	< 0.2
97-W11	97MITE-R	391235	6909113	15	filtered	0.002	0.812	< 0.005	-	9	< 0.5	< 0.1	< 0.1	52	4.0	< 0.05	0.3
97-W12	97MITE-S	392071	6908333	15	filtered	0.003	1.048	0.007	-	27	< 0.5	0.1	0.2	225	5.4	< 0.05	0.7
97-W13	97MITE-T	392860	6909732	15	filtered	0.002	0.533	< 0.005	-	6	< 0.5	< 0.1	< 0.1	10	1.8	< 0.05	0.3
97-W14	97MITE-U	391400	6911650	15	filtered	0.002	0.454	< 0.005	-	29	< 0.5	0.1	0.2	38	2.8	< 0.05	0.4
97-W15	97MITE-V	392532	6912008	15	filtered	< 0.002	0.487	< 0.005	-	13	< 0.5	< 0.1	< 0.1	6	1.0	< 0.05	< 0.2
99KAM-1	MOB990184	381901	6897219	15	filtered	0.0010	0.661	< 0.005	2.9	6	< 0.5	< 0.1	0.2	14	0.9	< 0.05	0.4
99KAM-2	MOB990185	377242	6897498	15	filtered	0.0010	0.690	< 0.005	3.2	13	< 0.5	0.2	0.3	39	2.2	< 0.05	0.4
99KAM-3	MOB990186	377190	6901086	15	filtered	0.0015	1.627	< 0.005	4.5	26	0.7	0.3	0.5	694	4.8	0.06	0.7
99KAM-4	MOB990187	377719	6905809	15	filtered	0.0008	0.798	< 0.005	3.2	19	< 0.5	0.1	0.3	29	0.7	< 0.05	0.5
99KAM-5	MOB990188	374867	6909606	15	filtered	0.0004	0.817	< 0.005	3.2	15	< 0.5	0.1	0.4	57	1.1	< 0.05	0.6
99KAM-6	MOB990189	377381	6914460	15	filtered	0.0021	0.922	< 0.005	3.1	19	< 0.5	0.1	0.3	175	2.9	< 0.05	0.5
99KAM-7	MOB990190	382543	6910120	15	filtered	0.0026	0.802	0.005	3.2	15	< 0.5	0.1	0.3	100	2.8	< 0.05	0.6
99KAM-8	MOB990191	380427	6907992	15	filtered	0.0019	0.752	< 0.005	3.1	14	< 0.5	< 0.1	0.3	24	0.6	< 0.05	0.5
99KAM-9	MOB990192	387667	6911517	15	filtered	0.0018	0.771	< 0.005	3.0	11	< 0.5	0.1	0.4	122	3.3	< 0.05	0.5
99KAM-10	MOB990193	389586	6908195	15	filtered	0.0018	0.820	0.006	3.1	12	< 0.5	0.1	0.4	48	0.9	< 0.05	0.5
99KAM-11	MOB990194	392839	6909777	15	filtered	0.0017	0.644	< 0.005	2.8	8	< 0.5	0.1	0.3	32	1.3	< 0.05	0.3
99KAM-12	MOB990195	395400	6905248	15	filtered	0.0016	0.601	< 0.005	2.7	3	< 0.5	< 0.1	0.2	11	0.3	< 0.05	0.2
99KAM-13	MOB990196	394907	6899752	15	filtered	0.0010	0.643	< 0.005	2.9	4	< 0.5	< 0.1	0.3	15	0.8	< 0.05	0.2
99KAM-14	MOB990197	387813	6902215	15	filtered	0.0017	0.706	< 0.005	2.9	8	< 0.5	0.1	0.3	132	4.2	< 0.05	0.4
99KAM-15	MOB990198	390676	6895855	15	filtered	0.0013	0.669	< 0.005	2.8	5	< 0.5	< 0.1	0.3	19	1.2	< 0.05	0.3
99KAM-16	MOB990199	408654	6905500	15	filtered	0.0012	0.546	< 0.005	2.9	5	< 0.5	< 0.1	0.3	13	0.2	< 0.05	< 0.2
99KAM-17	MOB990200	402332	6910418	15	filtered	0.0013	0.545	< 0.005	2.5	2	< 0.5	0.1	0.3	16	0.2	< 0.05	< 0.2
99KAM-18	MOB990201	400198	6912201	15	filtered	0.0011	0.538	< 0.005	2.7	3	< 0.5	< 0.1	0.3	20	0.3	< 0.05	< 0.2
99KAM-19	MOB990166	405045	6915898	15	filtered	0.0011	0.541	< 0.005	2.5	4	< 0.5	< 0.1	0.3	16	0.5	< 0.05	< 0.2
99SPI-1	MOB990174	350895	6883517	15	filtered	0.0017	0.510	< 0.005	2.0	11	< 0.5	< 0.1	0.2	42	1.1	< 0.05	0.4
99SPI-2	MOB990175	349732	6884943	15	filtered	0.0017	0.544	< 0.005	2.0	12	< 0.5	< 0.1	0.2	55	1.5	< 0.05	0.5
99SPI-3	MOB990176	350750	6884039	15	filtered	0.0017	0.554	< 0.005	1.9	14	< 0.5	< 0.1	0.2	59	1.7	< 0.05	0.5
99SPI-4	MOB990177	351670	6882871	15	filtered	0.0018	0.560	< 0.005	1.7	14	< 0.5	0.1	0.3	55	1.9	< 0.05	0.5
99SPI-5	MOB990178	349262	6885450	15	filtered	0.0016	0.641	< 0.005	1.9	17	1.2	0.1	0.3	72	1.7	< 0.05	0.7
99HAP-1	MOB990179	421097	6936957	15	filtered	0.0012	0.565	< 0.005	1.3	8	< 0.5	< 0.1	0.2	29	1.7	< 0.05	0.4
99KAM-1	MOB990184	381901	6897219	15	unfiltered	0.0011	0.723	< 0.005	3.0	7	< 0.5	< 0.1	0.3	18	3.4	< 0.05	0.3
99KAM-2	MOB990185	377242	6897498	15	unfiltered	0.0013	0.677	< 0.005	2.9	18	< 0.5	0.1	0.3	63	6.5	< 0.05	0.4
99KAM-3	MOB990186	377190	6901086	15	unfiltered	0.0019	1.578	0.007	4.2	39	1.0	0.3	0.5	986	8.3	0.11	0.6
99KAM-4	MOB990187	377719	6905809	15	unfiltered	0.0007	0.741	0.007	2.9	25	0.6	0.1	0.3	46	4.7	< 0.05	0.4
99KAM-5	MOB990188	374867	6909606	15	unfiltered	0.0008	0.762	< 0.005	2.9	21	0.8	0.1	0.4	90	5.5	< 0.05	0.5
99KAM-6	MOB990189	377381	6914460	15	unfiltered	0.0021	0.838	< 0.005	2.7	24	0.6	0.1	0.3	256	4.7	< 0.05	0.5
99KAM-7	MOB990190	382543	6910120	15	unfiltered	0.0022	0.767	< 0.005	2.9	21	< 0.5	0.2	0.3	133	6.5	< 0.05	0.5
99KAM-8	MOB990191	380427	6907992	15	unfiltered	0.0019	0.742	< 0.005	3.0	19	< 0.5	0.1	0.3	38	3.7	< 0.05	0.4
99KAM-9	MOB990192	387667	6911517	15	unfiltered	0.0021	0.724	0.005	2.8	20	0.6	0.2	0.3	236	10.1	0.06	0.5
99KAM-10	MOB990193	389586	6908195	15	unfiltered	0.0023	0.776	0.008	2.9	16	< 0.5	0.1	0.3	75	5.5	< 0.05	0.5
99KAM-11	MOB990194	392839	6909777	15	unfiltered	0.0017	0.601	< 0.005	2.4	11	< 0.5	0.1	0.2	49	5.6	< 0.05	0.3
99KAM-12	MOB990195	395400	6905248	15	unfiltered	0.0015	0.618	< 0.005	2.9	6	< 0.5	< 0.1	0.2	25	3.6	< 0.05	0.2

Appendix XIXa: Water Chemistry
Cations

Sample	Station ID	Easting	Northing	UTM	Sample type	Cu ppb	Zn ppb	As ppb	Se ppb	Rb ppb	Sr ppb	Y ppb	Mo ppb	Ag ppb	Cd ppb	In ppb	Sb ppb
97-W1	97MITE-L	395439	6905273	15	filtered	0.5	< 0.5	< 0.1	< 1	1.15	10.5	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	0.03
97-W2	97MITE-M	394995	6905932	15	filtered	0.5	< 0.5	0.1	< 1	1.18	10.4	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
97-W3	97MITE-N	394779	6905884	15	filtered	0.5	< 0.5	0.2	< 1	1.15	23.9	0.01	0.06	< 0.05	< 0.05	< 0.01	0.02
97-W4	97MITE-O	394212	6906528	15	filtered	0.8	< 0.5	0.4	< 1	1.88	41.0	0.02	0.11	< 0.05	< 0.05	< 0.01	0.02
97-W5	97MITE-P	393210	6907571	15	filtered	1.4	< 0.5	0.8	< 1	2.60	45.6	0.05	0.09	< 0.05	< 0.05	< 0.01	0.02
97-W6	97MITE-Q	394406	6906787	15	filtered	0.5	< 0.5	0.3	< 1	1.17	10.4	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
97-W7	97MITE-W	379420	6909633	15	filtered	0.6	< 0.5	0.3	< 1	1.33	11.4	0.04	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
97-W8	97MITE-X	380270	6908896	15	filtered	0.7	< 0.5	0.3	< 1	1.34	12.5	0.04	0.06	< 0.05	< 0.05	< 0.01	0.02
97-W9	97MITE-Y	380415	6908099	15	filtered	0.9	< 0.5	0.3	< 1	1.30	11.6	0.03	0.05	< 0.05	< 0.05	< 0.01	< 0.01
97-W10	97MITE-H	403250	6914400	15	filtered	0.5	< 0.5	0.2	< 1	1.10	11.1	0.01	< 0.05	< 0.05	< 0.05	< 0.01	0.02
97-W11	97MITE-R	391235	6909113	15	filtered	0.8	< 0.5	0.4	< 1	1.51	17.3	0.02	< 0.05	< 0.05	< 0.05	< 0.01	0.06
97-W12	97MITE-S	392071	6908333	15	filtered	1.2	< 0.5	0.4	< 1	1.31	19.1	0.08	0.06	< 0.05	< 0.05	< 0.01	< 0.01
97-W13	97MITE-T	392860	6909732	15	filtered	0.5	< 0.5	0.4	< 1	1.18	10.9	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
97-W14	97MITE-U	391400	6911650	15	filtered	1.4	1.4	0.3	< 1	1.34	20.1	0.06	0.07	< 0.05	< 0.05	< 0.01	< 0.01
97-W15	97MITE-V	392532	6912008	15	filtered	0.6	< 0.5	0.3	< 1	1.31	10.9	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-1	MOB990184	381901	6897219	15	filtered	0.6	< 0.5	0.2	< 1	1.56	13.0	0.02	0.06	< 0.05	< 0.05	< 0.01	0.01
99KAM-2	MOB990185	377242	6897498	15	filtered	0.7	0.5	0.2	< 1	1.47	12.9	0.03	0.07	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-3	MOB990186	377190	6901086	15	filtered	1.0	0.7	0.4	< 1	1.87	23.7	0.08	0.19	< 0.05	< 0.05	< 0.01	0.01
99KAM-4	MOB990187	377719	6905809	15	filtered	0.7	< 0.5	0.2	< 1	1.59	13.3	0.04	0.06	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-5	MOB990188	374867	6909606	15	filtered	0.8	1.7	0.2	< 1	1.65	13.6	0.04	0.08	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-6	MOB990189	377381	6914460	15	filtered	0.6	0.5	0.2	< 1	1.47	17.1	0.06	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-7	MOB990190	382543	6910120	15	filtered	0.6	< 0.5	0.2	< 1	1.60	13.1	0.04	0.07	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-8	MOB990191	380427	6907992	15	filtered	0.7	0.9	0.2	< 1	1.62	13.1	0.03	0.07	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-9	MOB990192	387667	6911517	15	filtered	0.7	< 0.5	0.1	< 1	1.88	20.4	0.04	0.06	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-10	MOB990193	389586	6908195	15	filtered	0.8	< 0.5	0.1	< 1	1.69	16.1	0.03	0.06	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-11	MOB990194	392839	6909777	15	filtered	0.7	< 0.5	0.2	< 1	1.23	14.3	0.02	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-12	MOB990195	395400	6905248	15	filtered	0.6	< 0.5	< 0.1	< 1	1.29	11.5	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	0.01
99KAM-13	MOB990196	394907	6899752	15	filtered	0.6	< 0.5	0.1	< 1	1.40	12.4	0.01	0.06	< 0.05	< 0.05	< 0.01	0.01
99KAM-14	MOB990197	387813	6902215	15	filtered	0.7	< 0.5	0.2	< 1	1.38	13.5	0.03	0.07	< 0.05	< 0.05	< 0.01	0.02
99KAM-15	MOB990198	390676	6895855	15	filtered	0.6	< 0.5	0.1	< 1	1.41	12.6	0.02	< 0.05	< 0.05	< 0.05	< 0.01	0.01
99KAM-16	MOB990199	408654	6905500	15	filtered	0.6	< 0.5	0.1	< 1	1.37	13.6	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-17	MOB990200	402332	6910418	15	filtered	0.6	< 0.5	< 0.1	< 1	1.28	12.3	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-18	MOB990201	400198	6912201	15	filtered	0.6	< 0.5	< 0.1	< 1	1.32	12.1	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-19	MOB990166	405045	6915898	15	filtered	0.6	< 0.5	0.1	< 1	1.26	12.2	0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99SPI-1	MOB990174	350895	6883517	15	filtered	0.9	0.8	0.1	< 1	1.37	8.1	0.03	0.07	< 0.05	< 0.05	< 0.01	< 0.01
99SPI-2	MOB990175	349732	6884943	15	filtered	0.8	0.7	0.1	< 1	1.46	8.9	0.04	0.08	< 0.05	< 0.05	< 0.01	< 0.01
99SPI-3	MOB990176	350750	6884039	15	filtered	0.8	< 0.5	0.1	< 1	1.54	8.4	0.04	0.07	< 0.05	< 0.05	< 0.01	< 0.01
99SPI-4	MOB990177	351670	6882871	15	filtered	0.8	< 0.5	0.2	< 1	1.51	8.4	0.03	0.07	0.19	< 0.05	< 0.01	< 0.01
99SPI-5	MOB990178	349262	6885450	15	filtered	1.0	1.5	0.2	< 1	1.65	9.2	0.04	0.09	< 0.05	< 0.05	< 0.01	< 0.01
99HAP-1	MOB990179	421097	6936957	15	filtered	1.3	0.7	0.1	< 1	1.68	16.0	0.02	0.07	< 0.05	< 0.05	< 0.01	0.01
99KAM-1	MOB990184	381901	6897219	15	unfiltered	0.6	< 0.5	0.2	< 1	1.53	13.8	0.03	0.06	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-2	MOB990185	377242	6897498	15	unfiltered	0.7	0.7	0.1	< 1	1.46	13.5	0.04	< 0.05	< 0.05	< 0.05	< 0.01	0.01
99KAM-3	MOB990186	377190	6901086	15	unfiltered	1.0	0.9	0.4	< 1	1.77	24.3	0.10	0.18	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-4	MOB990187	377719	6905809	15	unfiltered	0.7	< 0.5	0.2	< 1	1.57	13.4	0.04	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-5	MOB990188	374867	6909606	15	unfiltered	0.7	1.6	0.2	< 1	1.59	13.7	0.05	0.07	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-6	MOB990189	377381	6914460	15	unfiltered	0.6	0.6	0.1	< 1	1.40	17.4	0.07	< 0.05	< 0.05	< 0.05	< 0.01	0.01
99KAM-7	MOB990190	382543	6910120	15	unfiltered	0.6	< 0.5	0.2	< 1	1.56	13.4	0.05	0.07	< 0.05	< 0.05	< 0.01	0.01
99KAM-8	MOB990191	380427	6907992	15	unfiltered	0.7	1.0	0.1	< 1	1.58	13.4	0.04	0.07	< 0.05	< 0.05	< 0.01	0.01
99KAM-9	MOB990192	387667	6911517	15	unfiltered	0.8	0.8	0.2	< 1	1.90	21.3	0.06	0.07	< 0.05	< 0.05	< 0.01	0.01
99KAM-10	MOB990193	389586	6908195	15	unfiltered	0.7	< 0.5	0.1	< 1	1.68	16.4	0.04	0.07	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-11	MOB990194	392839	6909777	15	unfiltered	0.6	< 0.5	0.2	< 1	1.18	14.0	0.03	< 0.05	< 0.05	< 0.05	< 0.01	0.01
99KAM-12	MOB990195	395400	6905248	15	unfiltered	0.5	< 0.5	0.2	< 1	1.34	12.6	0.02	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01

Appendix XIXa: Water Chemistry
Cations

Sample	Station ID	Easting	Northing	UTM	Sample type	Cs ppb	Ba ppb	La ppb	Ce ppb	Pr ppb	Nd ppb	Sm ppb	Eu ppb	Tb ppb	Gd ppb	Dy ppb	Ho ppb
97-W1	97MITE-L	395439	6905273	15	filtered	< 0.01	4.4	0.04	0.03	0.007	0.026	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
97-W2	97MITE-M	394995	6905932	15	filtered	< 0.01	4.3	0.03	0.03	0.006	0.023	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
97-W3	97MITE-N	394779	6905884	15	filtered	< 0.01	10.0	0.03	0.05	0.007	0.021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
97-W4	97MITE-O	394212	6906528	15	filtered	< 0.01	8.7	0.06	0.09	0.012	0.048	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
97-W5	97MITE-P	393210	6907571	15	filtered	< 0.01	13.9	0.17	0.30	0.036	0.132	0.021	< 0.005	< 0.005	0.013	0.008	< 0.005
97-W6	97MITE-Q	394406	6906787	15	filtered	< 0.01	4.3	0.03	0.03	0.008	0.028	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
97-W7	97MITE-W	379420	6909633	15	filtered	< 0.01	4.9	0.10	0.11	0.021	0.081	0.012	< 0.005	< 0.005	0.010	0.005	< 0.005
97-W8	97MITE-X	380270	6908896	15	filtered	< 0.01	5.1	0.10	0.13	0.022	0.079	0.013	< 0.005	< 0.005	0.009	< 0.005	< 0.005
97-W9	97MITE-Y	380415	6908099	15	filtered	< 0.01	4.4	0.09	0.12	0.019	0.076	0.012	< 0.005	< 0.005	0.010	0.005	< 0.005
97-W10	97MITE-H	403250	6914400	15	filtered	< 0.01	3.9	0.04	0.05	0.007	0.029	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
97-W11	97MITE-R	391235	6909113	15	filtered	< 0.01	9.8	0.04	0.06	0.010	0.034	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
97-W12	97MITE-S	392071	6908333	15	filtered	0.01	9.7	0.18	0.29	0.043	0.159	0.027	< 0.005	< 0.005	0.017	0.012	< 0.005
97-W13	97MITE-T	392860	6909732	15	filtered	< 0.01	4.3	0.03	0.03	0.005	0.020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
97-W14	97MITE-U	391400	6911650	15	filtered	< 0.01	9.6	0.20	0.28	0.042	0.159	0.022	< 0.005	< 0.005	0.014	0.010	< 0.005
97-W15	97MITE-V	392532	6912008	15	filtered	< 0.01	3.9	0.02	0.03	< 0.005	0.018	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
99KAM-1	MOB990184	381901	6897219	15	filtered	< 0.01	5.1	0.05	0.05	0.015	0.040	0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005
99KAM-2	MOB990185	377242	6897498	15	filtered	< 0.01	5.4	0.10	0.15	0.023	0.084	0.014	< 0.005	< 0.005	0.009	0.006	< 0.005
99KAM-3	MOB990186	377190	6901086	15	filtered	< 0.01	7.1	0.21	0.42	0.054	0.217	0.034	0.006	< 0.005	0.019	0.014	< 0.005
99KAM-4	MOB990187	377719	6905809	15	filtered	< 0.01	5.3	0.09	0.11	0.020	0.071	0.009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
99KAM-5	MOB990188	374867	6909606	15	filtered	< 0.01	5.6	0.10	0.14	0.022	0.098	0.011	< 0.005	< 0.005	0.010	0.010	< 0.005
99KAM-6	MOB990189	377381	6914460	15	filtered	< 0.01	7.5	0.19	0.29	0.044	0.163	0.031	0.006	< 0.005	0.013	0.015	< 0.005
99KAM-7	MOB990190	382543	6910120	15	filtered	< 0.01	5.2	0.11	0.17	0.023	0.098	0.010	< 0.005	< 0.005	0.010	< 0.005	< 0.005
99KAM-8	MOB990191	380427	6907992	15	filtered	< 0.01	5.0	0.07	0.09	0.018	0.057	0.011	< 0.005	< 0.005	0.008	0.006	< 0.005
99KAM-9	MOB990192	387667	6911517	15	filtered	0.01	9.7	0.13	0.18	0.025	0.105	0.016	< 0.005	< 0.005	0.007	0.008	< 0.005
99KAM-10	MOB990193	389586	6908195	15	filtered	< 0.01	6.5	0.07	0.09	0.014	0.076	0.012	< 0.005	< 0.005	0.010	0.006	< 0.005
99KAM-11	MOB990194	392839	6909777	15	filtered	< 0.01	7.6	0.06	0.08	0.013	0.049	0.010	< 0.005	< 0.005	0.008	0.007	< 0.005
99KAM-12	MOB990195	395400	6905248	15	filtered	< 0.01	4.4	0.03	0.03	< 0.005	0.024	< 0.005	< 0.005	< 0.005	< 0.005	0.006	< 0.005
99KAM-13	MOB990196	394907	6899752	15	filtered	< 0.01	4.6	0.04	0.04	0.009	0.030	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
99KAM-14	MOB990197	387813	6902215	15	filtered	< 0.01	5.1	0.07	0.09	0.014	0.066	< 0.005	< 0.005	< 0.005	0.005	0.005	< 0.005
99KAM-15	MOB990198	390676	6895855	15	filtered	< 0.01	4.7	0.05	0.04	0.009	0.036	0.007	< 0.005	< 0.005	0.005	< 0.005	< 0.005
99KAM-16	MOB990199	408654	6905500	15	filtered	< 0.01	5.1	0.02	0.02	< 0.005	0.019	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
99KAM-17	MOB990200	402332	6910418	15	filtered	< 0.01	4.4	0.02	0.02	< 0.005	0.021	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
99KAM-18	MOB990201	400198	6912201	15	filtered	< 0.01	4.4	0.03	0.03	0.007	0.020	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
99KAM-19	MOB990166	405045	6915898	15	filtered	< 0.01	4.5	0.04	0.04	0.007	0.024	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
99SPI-1	MOB990174	350895	6883517	15	filtered	< 0.01	4.9	0.08	0.13	0.018	0.062	0.009	< 0.005	< 0.005	0.007	0.007	< 0.005
99SPI-2	MOB990175	349732	6884943	15	filtered	< 0.01	4.9	0.08	0.13	0.018	0.065	0.008	< 0.005	< 0.005	0.012	0.006	< 0.005
99SPI-3	MOB990176	350750	6884039	15	filtered	< 0.01	5.2	0.09	0.14	0.019	0.089	0.006	< 0.005	< 0.005	0.013	0.006	< 0.005
99SPI-4	MOB990177	351670	6882871	15	filtered	< 0.01	4.9	0.08	0.12	0.019	0.076	0.008	< 0.005	< 0.005	0.010	< 0.005	< 0.005
99SPI-5	MOB990178	349262	6885450	15	filtered	< 0.01	5.6	0.11	0.19	0.023	0.092	0.007	< 0.005	< 0.005	0.012	0.006	< 0.005
99HAP-1	MOB990179	421097	6936957	15	filtered	< 0.01	8.1	0.05	0.06	0.012	0.044	0.008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
99KAM-1	MOB990184	381901	6897219	15	unfiltered	< 0.01	5.2	0.06	0.07	0.012	0.055	0.008	< 0.005	< 0.005	0.008	0.005	< 0.005
99KAM-2	MOB990185	377242	6897498	15	unfiltered	< 0.01	5.5	0.13	0.22	0.030	0.111	0.017	< 0.005	< 0.005	0.011	0.008	< 0.005
99KAM-3	MOB990186	377190	6901086	15	unfiltered	< 0.01	7.3	0.29	0.57	0.065	0.259	0.037	0.007	< 0.005	0.027	0.017	< 0.005
99KAM-4	MOB990187	377719	6905809	15	unfiltered	< 0.01	5.4	0.12	0.18	0.028	0.106	0.019	< 0.005	< 0.005	0.011	0.009	< 0.005
99KAM-5	MOB990188	374867	6909606	15	unfiltered	< 0.01	6.1	0.14	0.20	0.028	0.113	0.012	< 0.005	< 0.005	0.012	0.010	< 0.005
99KAM-6	MOB990189	377381	6914460	15	unfiltered	0.01	7.6	0.24	0.38	0.051	0.192	0.036	< 0.005	< 0.005	0.025	0.012	< 0.005
99KAM-7	MOB990190	382543	6910120	15	unfiltered	< 0.01	5.3	0.13	0.21	0.030	0.134	0.019	< 0.005	< 0.005	0.011	0.010	< 0.005
99KAM-8	MOB990191	380427	6907992	15	unfiltered	< 0.01	5.4	0.10	0.13	0.022	0.087	0.014	< 0.005	< 0.005	0.012	0.007	< 0.005
99KAM-9	MOB990192	387667	6911517	15	unfiltered	0.01	10.3	0.20	0.33	0.043	0.188	0.026	< 0.005	< 0.005	0.027	0.008	< 0.005
99KAM-10	MOB990193	389586	6908195	15	unfiltered	< 0.01	7.0	0.11	0.14	0.021	0.073	0.015	< 0.005	< 0.005	0.008	< 0.005	< 0.005
99KAM-11	MOB990194	392839	6909777	15	unfiltered	< 0.01	7.8	0.08	0.12	0.016	0.067	0.008	< 0.005	< 0.005	0.011	0.007	< 0.005
99KAM-12	MOB990195	395400	6905248	15	unfiltered	< 0.01	4.6	0.05	0.05	0.010	0.037	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005

Appendix XIXa: Water Chemistry
Cations

Sample	Station ID	Easting	Northing	UTM	Sample type	Er ppb	Tm ppb	Yb ppb	Lu ppb	Re ppb	Tl ppb	Pb ppb	Bi ppb	Th ppb	U ppb
97-W1	97MITE-L	395439	6905273	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.009
97-W2	97MITE-M	394995	6905932	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.010
97-W3	97MITE-N	394779	6905884	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.024
97-W4	97MITE-O	394212	6906528	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	0.02	-	-	0.045
97-W5	97MITE-P	393210	6907571	15	filtered	0.005	< 0.005	< 0.005	< 0.005	-	0.007	0.06	-	-	0.095
97-W6	97MITE-Q	394406	6906787	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.008
97-W7	97MITE-W	379420	6909633	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.023
97-W8	97MITE-X	380270	6908896	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.026
97-W9	97MITE-Y	380415	6908099	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.024
97-W10	97MITE-H	403250	6914400	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.008
97-W11	97MITE-R	391235	6909113	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.021
97-W12	97MITE-S	392071	6908333	15	filtered	0.009	< 0.005	0.009	< 0.005	-	< 0.005	0.02	-	-	0.044
97-W13	97MITE-T	392860	6909732	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.007
97-W14	97MITE-U	391400	6911650	15	filtered	0.006	< 0.005	0.006	< 0.005	-	< 0.005	< 0.01	-	-	0.037
97-W15	97MITE-V	392532	6912008	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	-	< 0.005	< 0.01	-	-	0.008
99KAM-1	MOB990184	381901	6897219	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	0.01	0.03	0.012
99KAM-2	MOB990185	377242	6897498	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.05	0.022
99KAM-3	MOB990186	377190	6901086	15	filtered	0.006	< 0.005	0.007	< 0.005	< 0.005	0.008	0.05	< 0.01	0.15	0.043
99KAM-4	MOB990187	377719	6905809	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.01	0.06	0.023
99KAM-5	MOB990188	374867	6909606	15	filtered	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	< 0.01	0.06	0.023
99KAM-6	MOB990189	377381	6914460	15	filtered	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	< 0.01	0.06	0.022
99KAM-7	MOB990190	382543	6910120	15	filtered	0.006	< 0.005	0.006	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.07	0.028
99KAM-8	MOB990191	380427	6907992	15	filtered	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.05	0.024
99KAM-9	MOB990192	387667	6911517	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.04	0.023
99KAM-10	MOB990193	389586	6908195	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.05	0.026
99KAM-11	MOB990194	392839	6909777	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.04	0.009
99KAM-12	MOB990195	395400	6905248	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.03	0.009
99KAM-13	MOB990196	394907	6899752	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.02	0.013
99KAM-14	MOB990197	387813	6902215	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.03	0.016
99KAM-15	MOB990198	390676	6895855	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.01	0.02	0.010
99KAM-16	MOB990199	408654	6905500	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.01	< 0.01	0.006
99KAM-17	MOB990200	402332	6910418	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	0.006
99KAM-18	MOB990201	400198	6912201	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.01	< 0.01	0.008
99KAM-19	MOB990166	405045	6915898	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	0.009
99SPI-1	MOB990174	350895	6883517	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.06	0.038
99SPI-2	MOB990175	349732	6884943	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.02	< 0.01	0.05	0.043
99SPI-3	MOB990176	350750	6884039	15	filtered	0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.01	0.06	0.038
99SPI-4	MOB990177	351670	6882871	15	filtered	< 0.005	< 0.005	0.006	< 0.005	< 0.005	0.005	0.01	< 0.01	0.05	0.042
99SPI-5	MOB990178	349262	6885450	15	filtered	< 0.005	< 0.005	0.007	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.06	0.051
99HAP-1	MOB990179	421097	6936957	15	filtered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.04	< 0.01	0.03	0.026
99KAM-1	MOB990184	381901	6897219	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.04	0.015
99KAM-2	MOB990185	377242	6897498	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.05	0.026
99KAM-3	MOB990186	377190	6901086	15	unfiltered	0.011	< 0.005	0.010	< 0.005	< 0.005	< 0.005	0.05	< 0.01	0.13	0.051
99KAM-4	MOB990187	377719	6905809	15	unfiltered	0.008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.05	0.023
99KAM-5	MOB990188	374867	6909606	15	unfiltered	0.007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	< 0.01	0.05	0.033
99KAM-6	MOB990189	377381	6914460	15	unfiltered	0.006	< 0.005	0.005	< 0.005	< 0.005	0.006	0.03	< 0.01	0.06	0.032
99KAM-7	MOB990190	382543	6910120	15	unfiltered	< 0.005	< 0.005	0.006	< 0.005	< 0.005	0.005	0.02	< 0.01	0.06	0.021
99KAM-8	MOB990191	380427	6907992	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	< 0.01	0.04	0.026
99KAM-9	MOB990192	387667	6911517	15	unfiltered	0.008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.05	0.030
99KAM-10	MOB990193	389586	6908195	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.005	0.02	< 0.01	0.04	0.025
99KAM-11	MOB990194	392839	6909777	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.04	0.011
99KAM-12	MOB990195	395400	6905248	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.02	0.009

Appendix XIXa: Water Chemistry
Cations

Sample	Station ID	Easting	Northing	UTM	Sample type	Hg ppb	Li ppb	Be ppb	B ppb	Al ppb	Tl ppb	V ppb	Cr ppb	Fe ppb	Mn ppb	Co ppb	Ni ppb
99KAM-13	MOB990196	394907	6899752	15	unfiltered	0.0012	0.609	< 0.005	2.9	5	< 0.5	< 0.1	0.2	19	2.8	< 0.05	0.3
99KAM-14	MOB990197	387813	6902215	15	unfiltered	0.0018	0.615	< 0.005	2.5	10	< 0.5	0.1	0.2	181	6.2	0.05	0.3
99KAM-15	MOB990198	390676	6895855	15	unfiltered	0.0017	0.623	< 0.005	2.8	7	< 0.5	< 0.1	0.2	24	3.3	< 0.05	< 0.2
99KAM-16	MOB990199	408654	6905500	15	unfiltered	0.0014	0.493	< 0.005	2.8	11	< 0.5	< 0.1	0.2	17	2.5	< 0.05	< 0.2
99KAM-17	MOB990200	402332	6910418	15	unfiltered	0.0014	0.492	< 0.005	2.4	4	< 0.5	< 0.1	0.2	20	2.7	< 0.05	< 0.2
99KAM-18	MOB990201	400198	6912201	15	unfiltered	0.0012	0.500	< 0.005	2.5	6	< 0.5	< 0.1	0.2	33	3.7	< 0.05	< 0.2
99KAM-19	MOB990166	405045	6915898	15	unfiltered	0.0011	0.488	< 0.005	2.4	8	< 0.5	0.1	0.3	26	4.2	< 0.05	0.2
99SPI-1	MOB990174	350895	6883517	15	unfiltered	0.0021	0.594	0.010	1.7	19	< 0.5	0.1	0.3	111	6.2	< 0.05	0.5
99SPI-2	MOB990175	349732	6884943	15	unfiltered	0.0021	0.624	< 0.005	1.8	32	1.0	0.2	0.3	244	13.1	0.10	0.5
99SPI-3	MOB990176	350750	6884039	15	unfiltered	0.0020	0.587	< 0.005	1.6	26	0.5	0.2	0.3	140	6.9	0.06	0.5
99SPI-4	MOB990177	351670	6882871	15	unfiltered	0.0018	0.610	0.006	1.4	27	0.8	0.1	0.3	136	7.8	0.07	0.6
99SPI-5	MOB990178	349262	6885450	15	unfiltered	0.0020	0.671	0.006	1.7	27	0.5	0.1	0.2	129	5.8	0.06	0.5
99HAPPY-1	MOB990179	421097	6936957	15	unfiltered	0.0015	0.567	< 0.005	1.4	10	< 0.5	< 0.1	0.2	55	3.6	< 0.05	0.5

Appendix XIXa: Water Chemistry

Cations

Sample	Station ID	Easting	Northing	UTM	Sample type	Cu ppb	Zn ppb	As ppb	Se ppb	Rb ppb	Sr ppb	Y ppb	Mo ppb	Ag ppb	Cd ppb	In ppb	Sb ppb
99KAM-13	MOB990196	394907	6899752	15	unfiltered	0.5	< 0.5	0.1	< 1	1.31	12.0	0.02	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-14	MOB990197	387813	6902215	15	unfiltered	0.7	< 0.5	0.1	< 1	1.31	13.1	0.03	0.06	< 0.05	< 0.05	< 0.01	0.01
99KAM-15	MOB990198	390676	6895855	15	unfiltered	0.6	< 0.5	0.2	< 1	1.37	12.5	0.02	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-16	MOB990199	408654	6905500	15	unfiltered	0.5	< 0.5	< 0.1	< 1	1.39	13.7	0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-17	MOB990200	402332	6910418	15	unfiltered	0.5	< 0.5	< 0.1	< 1	1.18	12.0	< 0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-18	MOB990201	400198	6912201	15	unfiltered	0.5	< 0.5	< 0.1	< 1	1.15	11.9	0.01	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
99KAM-19	MOB990166	405045	6915898	15	unfiltered	0.6	< 0.5	0.1	< 1	1.15	11.5	0.01	< 0.05	< 0.05	< 0.05	< 0.01	0.01
99SPI-1	MOB990174	350895	6883517	15	unfiltered	0.9	< 0.5	0.1	< 1	1.58	8.6	0.05	0.08	< 0.05	< 0.05	< 0.01	< 0.01
99SPI-2	MOB990175	349732	6884943	15	unfiltered	1.1	1.5	0.1	< 1	1.66	9.2	0.08	0.07	< 0.05	< 0.05	< 0.01	< 0.01
99SPI-3	MOB990176	350750	6884039	15	unfiltered	0.9	0.6	0.2	< 1	1.59	8.8	0.05	0.08	< 0.05	< 0.05	< 0.01	< 0.01
99SPI-4	MOB990177	351670	6882871	15	unfiltered	0.9	0.6	0.2	< 1	1.65	8.7	0.06	0.08	< 0.05	< 0.05	< 0.01	< 0.01
99SPI-5	MOB990178	349262	6885450	15	unfiltered	1.1	1.5	0.2	< 1	1.67	9.3	0.06	0.08	< 0.05	< 0.05	< 0.01	< 0.01
99HAPPY-1	MOB990179	421097	6936957	15	unfiltered	2.0	2.2	0.1	< 1	1.68	15.8	0.03	0.06	< 0.05	< 0.05	< 0.01	0.03

Appendix XIXa: Water Chemistry
Cations

Sample	Station ID	Easting	Northing	UTM	Sample type	Cs ppb	Ba ppb	La ppb	Ce ppb	Pr ppb	Nd ppb	Sm ppb	Eu ppb	Tb ppb	Gd ppb	Dy ppb	Ho ppb
99KAM-13	MOB990196	394907	6899752	15	unfiltered	< 0.01	4.5	0.05	0.05	0.009	0.038	0.011	< 0.005	< 0.005	0.006	< 0.005	< 0.005
99KAM-14	MOB990197	387813	6902215	15	unfiltered	< 0.01	5.1	0.08	0.11	0.018	0.063	0.014	< 0.005	< 0.005	0.009	< 0.005	< 0.005
99KAM-15	MOB990198	390676	6895855	15	unfiltered	< 0.01	4.6	0.05	0.05	0.010	0.041	< 0.005	< 0.005	< 0.005	0.008	< 0.005	< 0.005
99KAM-16	MOB990199	408654	6905500	15	unfiltered	< 0.01	5.1	0.03	0.04	0.008	0.028	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
99KAM-17	MOB990200	402332	6910418	15	unfiltered	< 0.01	4.3	0.03	0.03	0.008	0.023	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005
99KAM-18	MOB990201	400198	6912201	15	unfiltered	< 0.01	4.4	0.05	0.06	0.010	0.035	0.007	< 0.005	< 0.005	0.005	< 0.005	< 0.005
99KAM-19	MOB990166	405045	6915898	15	unfiltered	< 0.01	4.4	0.05	0.07	0.010	0.043	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005
99SPI-1	MOB990174	350895	6883517	15	unfiltered	< 0.01	5.7	0.14	0.23	0.031	0.114	0.014	< 0.005	< 0.005	0.015	0.011	< 0.005
99SPI-2	MOB990175	349732	6884943	15	unfiltered	< 0.01	6.4	0.24	0.45	0.052	0.231	0.028	< 0.005	< 0.005	0.023	0.015	< 0.005
99SPI-3	MOB990176	350750	6884039	15	unfiltered	< 0.01	5.9	0.15	0.25	0.032	0.126	0.014	< 0.005	< 0.005	0.013	0.011	< 0.005
99SPI-4	MOB990177	351670	6882871	15	unfiltered	< 0.01	5.6	0.15	0.27	0.033	0.122	0.019	< 0.005	< 0.005	0.012	0.009	< 0.005
99SPI-5	MOB990178	349262	6885450	15	unfiltered	< 0.01	5.9	0.16	0.30	0.032	0.124	0.018	0.006	< 0.005	0.018	0.006	< 0.005
99HAPPY-1	MOB990179	421097	6936957	15	unfiltered	< 0.01	8.1	0.09	0.09	0.018	0.055	0.013	< 0.005	< 0.005	0.008	< 0.005	< 0.005

Appendix XIXa: Water Chemistry
Cations

Sample	Station ID	Easting	Northing	UTM	Sample type	Er ppb	Tm ppb	Yb ppb	Lu ppb	Re ppb	Tl ppb	Pb ppb	Bi ppb	Th ppb	U ppb
99KAM-13	MOB990196	394907	6899752	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.02	0.014
99KAM-14	MOB990197	387813	6902215	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.03	0.017
99KAM-15	MOB990198	390676	6895855	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	0.02	0.013
99KAM-16	MOB990199	408654	6905500	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.01	< 0.01	0.010
99KAM-17	MOB990200	402332	6910418	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.01	< 0.01	0.009
99KAM-18	MOB990201	400198	6912201	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01	< 0.01	< 0.01	0.011
99KAM-19	MOB990166	405045	6915898	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	0.009
99SPI-1	MOB990174	350895	6883517	15	unfiltered	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	0.02	< 0.01	0.05	0.046
99SPI-2	MOB990175	349732	6884943	15	unfiltered	0.008	< 0.005	0.007	< 0.005	< 0.005	< 0.005	0.06	< 0.01	0.06	0.049
99SPI-3	MOB990176	350750	6884039	15	unfiltered	0.006	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	< 0.01	0.06	0.039
99SPI-4	MOB990177	351670	6882871	15	unfiltered	0.008	< 0.005	0.007	< 0.005	< 0.005	< 0.005	0.03	< 0.01	0.05	0.046
99SPI-5	MOB990178	349262	6885450	15	unfiltered	< 0.005	< 0.005	0.007	< 0.005	< 0.005	< 0.005	0.03	< 0.01	0.08	0.048
99HAPPY-1	MOB990179	421097	6936957	15	unfiltered	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.17	< 0.01	0.03	0.029

Appendix XIX
Water Chemistry
Part B: Anions

Note:

Sample preparation: filtered: <0.45 µm; unfiltered: bulk
Analytical Method: Dionex 2100 IC System
Laboratory: MRD's Analytical Chemistry Laboratory

Detection Limits:

Element	DL
NO_2 (ppb)	50
NO_3 (ppb)	50
F (ppb)	50
PO_4 (ppb)	50
Br (ppb)	50
SO_4 (ppm)	0.0[illegible]
Cl (ppm)	0.10

Appendix XIXb: Water Chemistry
Anions

Sample	Station ID	Easting	Northing	UTM	Sample Type	NO_2 ppb	NO_3 ppb	F ppb	PO_4 ppb	Br ppb	SO_4 ppm	Cl ppm
97-W1	97MITE-L	395439	6905273	15	filtered	<50	<50	<50	<50	<50	1.34	3.17
97-W2	97MITE-M	394995	6905932	15	filtered	<50	<50	93	<50	<50	1.33	3.27
97-W3	97MITE-N	394779	6905884	15	filtered	<50	<50	72	<50	<50	1.06	1.63
97-W4	97MITE-O	394212	6906528	15	filtered	<50	<50	69	<50	<50	1.07	4.00
97-W5	97MITE-P	393210	6907571	15	filtered	<50	<50	239	<50	<50	0.86	16.30
97-W6	97MITE-Q	394406	6906787	15	filtered	<50	<50	<50	<50	<50	1.35	3.30
97-W7	97MITE-W	379420	6909633	15	filtered	<50	<50	<50	<50	<50	1.30	3.99
97-W8	97MITE-X	380270	6908896	15	filtered	<50	<50	<50	<50	<50	1.39	4.90
97-W9	97MITE-Y	380415	6908099	15	filtered	<50	<50	<50	<50	<50	1.38	4.79
97-W10	97MITE-H	403250	6914400	15	filtered	<50	<50	<50	<50	<50	1.35	3.86
97-W11	97MITE-R	391235	6909113	15	filtered	<50	985	73	<50	<50	1.36	2.95
97-W12	97MITE-S	392071	6908333	15	filtered	<50	<50	97	<50	<50	1.07	3.74
97-W13	97MITE-T	392860	6909732	15	filtered	<50	<50	<50	<50	<50	1.38	3.62
97-W14	97MITE-U	391400	6911650	15	filtered	<50	<50	<50	<50	<50	1.50	1.57
97-W15	97MITE-V	392532	6912008	15	filtered	<50	<50	<50	<50	<50	1.41	3.36
99KAM-2	MOB990185	377242	6897498	15	filtered	<50	<50	<50	-	<50	1.57	4.03
99KAM-3	MOB990186	377190	6901086	15	filtered	<50	<50	221	-	<50	2.63	7.36
99KAM-4	MOB990187	377719	6905809	15	filtered	<50	<50	<50	-	<50	1.62	4.36
99KAM-5	MOB990188	374867	6909606	15	filtered	<50	<50	<50	-	<50	1.69	4.52
99KAM-6	MOB990189	377381	6914460	15	filtered	<50	<50	<50	-	<50	1.70	6.69
99KAM-7	MOB990190	382543	6910120	15	filtered	<50	<50	<50	-	<50	1.72	4.41
99KAM-8	MOB990191	380427	6907992	15	filtered	<50	<50	<50	-	<50	1.66	4.47
99KAM-9	MOB990192	387667	6911517	15	filtered	<50	<50	<50	-	<50	1.77	3.87
99KAM-10	MOB990193	389586	6908195	15	filtered	<50	<50	<50	-	<50	1.72	4.40
99KAM-11	MOB990194	392839	6909777	15	filtered	<50	<50	<50	-	<50	1.42	3.99
99KAM-12	MOB990195	395400	6905248	15	filtered	<50	<50	<50	-	<50	1.51	3.46
99KAM-13	MOB990196	394907	6899752	15	filtered	<50	<50	<50	-	<50	1.55	3.79
99KAM-14	MOB990197	387813	6902215	15	filtered	<50	<50	<50	-	<50	1.60	4.27
99KAM-15	MOB990198	390676	6895855	15	filtered	<50	<50	<50	-	<50	1.56	3.95
99KAM-16	MOB990199	408654	6905500	15	filtered	<50	<50	<50	-	<50	1.52	3.42
99KAM-17	MOB990200	402332	6910418	15	filtered	<50	<50	<50	-	<50	1.55	3.42
99KAM-18	MOB990201	400198	6912201	15	filtered	<50	<50	100	-	<50	1.43	3.43
99KAM-19	MOB990166	405045	6915898	15	filtered	<50	<50	<50	-	<50	1.44	3.44
99SPI-1	MOB990174	350895	6883517	15	filtered	<50	228	52	-	<50	1.26	1.98
99SPI-2	MOB990175	349732	6884943	15	filtered	<50	<50	<50	-	<50	1.31	2.05
99SPI-3	MOB990176	350750	6884039	15	filtered	<50	<50	<50	-	<50	1.29	2.09
99SPI-4	MOB990177	351670	6882871	15	filtered	<50	<50	<50	-	<50	1.23	1.98
99SPI-5	MOB990178	349262	6885450	15	filtered	<50	<50	<50	-	<50	1.37	2.07
99HAPPY-1	MOB990179	421097	6936957	15	filtered	<50	<50	<50	-	<50	3.20	3.68
99KAM-1	MOB990184	381901	6897219	15	unfiltered	<50	<50	<50	-	<50	1.59	4.09
99KAM-2	MOB990185	377242	6897498	15	unfiltered	<50	<50	<50	-	<50	1.50	3.97
99KAM-3	MOB990186	377190	6901086	15	unfiltered	<50	<50	54	-	<50	2.57	7.47
99KAM-4	MOB990187	377719	6905809	15	unfiltered	<50	<50	<50	-	<50	1.66	4.35
99KAM-5	MOB990188	374867	6909606	15	unfiltered	<50	<50	<50	-	<50	1.71	4.46
99KAM-6	MOB990189	377381	6914460	15	unfiltered	<50	<50	<50	-	<50	1.80	6.74
99KAM-7	MOB990190	382543	6910120	15	unfiltered	<50	<50	<50	-	<50	1.60	4.49
99KAM-8	MOB990191	380427	6907992	15	unfiltered	<50	<50	<50	-	<50	1.66	4.43
99KAM-9	MOB990192	387667	6911517	15	unfiltered	<50	<50	<50	-	<50	1.79	3.93
99KAM-10	MOB990193	389586	6908195	15	unfiltered	<50	<50	<50	-	<50	1.84	4.68
99KAM-11	MOB990194	392839	6909777	15	unfiltered	<50	<50	<50	-	<50	1.35	4.06

Appendix XIXb: Water Chemistry
Anions

Sample	Station ID	Easting	Northing	UTM	Sample Type	NO_2 ppb	NO_3 ppb	F ppb	PO_4 ppb	Br ppb	SO_4 ppm	Cl ppm
99KAM-12	MOB990195	395400	6905248	15	unfiltered	<50	<50	<50	-	<50	1.47	3.45
99KAM-13	MOB990196	394907	6899752	15	unfiltered	<50	<50	<50	-	<50	1.59	3.82
99KAM-14	MOB990197	387813	6902215	15	unfiltered	<50	<50	<50	-	<50	1.53	4.38
99KAM-15	MOB990198	390676	6895855	15	unfiltered	<50	<50	<50	-	<50	1.55	4.03
99KAM-16	MOB990199	408654	6905500	15	unfiltered	<50	231	76	-	<50	1.45	3.56
99KAM-17	MOB990200	402332	6910418	15	unfiltered	<50	<50	<50	-	<50	1.55	3.55
99KAM-18	MOB990201	400198	6912201	15	unfiltered	<50	<50	<50	-	<50	1.47	3.46
99KAM-19	MOB990166	405045	6915898	15	unfiltered	<50	<50	<50	-	<50	1.49	3.35
99SPI-1	MOB990174	350895	6883517	15	unfiltered	<50	<50	<50	-	<50	1.32	1.96
99SPI-2	MOB990175	349732	6884943	15	unfiltered	<50	<50	<50	-	<50	1.30	2.07
99SPI-3	MOB990176	350750	6884039	15	unfiltered	<50	<50	<50	-	<50	1.20	2.15
99SPI-4	MOB990177	351670	6882871	15	unfiltered	<50	<50	171	-	<50	1.30	2.02
99SPI-5	MOB990178	349262	6885450	15	unfiltered	<50	<50	<50	-	<50	1.45	2.03
99HAPPY-1	MOB990179	421097	6936957	15	unfiltered	<50	<50	<50	-	<50	3.29	3.76

Appendix XIX
Water Chemistry
Part C: TOC, DOC, pH and Alkalinity

Note:

Total Organic Carbon (TOC)
Sample preparation: unfiltered: bulk; from anion aliquot
Analytical Method: Schimadzu 500 TOC instrument
Laboratory: MRD's Analytical Development Laboratory
Detection Limit: 1.0

Dissolved Organic Carbon (DOC)
Sample preparation: filtered: <0.45 µm; from anion aliquot
Analytical Method: Schimadzu 500 TOC instrument
Laboratory: MRD's Analytical Development Laboratory
Detection Limit: 1.0

pH
Sample preparation: filtered: <0.45 µm; unfiltered: bulk; from anion aliquot
Analytical Method: Cole Palmer 5800-05 Solution Analyzer with an Accumet Ag/AgCl combination electrode
Laboratory: MRD's Analytical Development Laboratory

Alkalinity
Sample preparation: filtered: <0.45 µm; unfiltered: bulk; from anion aliquot
Analytical Method: Mandel PC Titrate system equipped with a Gilson 222 Autosampler
Laboratory: MRD's Analytical Development Laboratory
Detection Limit: 1.0 ppm of $CaCO_3$

Appendix XIXc: Water Chemistry
TOC, DOC, pH and Alkalinity

Sample	Sation ID	Easting	Northing	UTM	Sample Type	TOC ppm	DOC ppm	pH	Alkalinity $CaCO_3$ (ppm)
99KAM-1	MOB990184	381901	6897219	15	filtered	-	3.8	6.3	5.4
99KAM-2	MOB990185	377242	6897498	15	filtered	-	4.4	6.3	5.2
99KAM-3	MOB990186	377190	6901086	15	filtered	-	9.0	6.5	10.4
99KAM-4	MOB990187	377719	6905809	15	filtered	-	4.8	6.2	5.4
99KAM-5	MOB990188	374867	6909606	15	filtered	-	5.1	6.3	5.6
99KAM-6	MOB990189	377381	6914460	15	filtered	-	4.9	6.2	3.7
99KAM-7	MOB990190	382543	6910120	15	filtered	-	5.0	6.3	4.6
99KAM-8	MOB990191	380427	6907992	15	filtered	-	4.8	6.3	5.0
99KAM-9	MOB990192	387667	6911517	15	filtered	-	5.7	6.4	9.7
99KAM-10	MOB990193	389586	6908195	15	filtered	-	5.3	6.4	7.2
99KAM-11	MOB990194	392839	6909777	15	filtered	-	4.1	6.4	8.3
99KAM-12	MOB990195	395400	6905248	15	filtered	-	3.1	6.3	5.5
99KAM-13	MOB990196	394907	6899752	15	filtered	-	3.5	6.3	6.7
99KAM-14	MOB990197	387813	6902215	15	filtered	-	4.1	6.3	5.7
99KAM-15	MOB990198	390676	6895855	15	filtered	-	3.7	6.3	5.2
99KAM-16	MOB990199	408654	6905500	15	filtered	-	2.9	6.3	5.3
99KAM-17	MOB990200	402332	6910418	15	filtered	-	2.8	6.3	5.9
99KAM-18	MOB990201	400198	6912201	15	filtered	-	3.0	6.3	6.1
99KAM-19	MOB990166	405045	6915898	15	filtered	-	3.1	6.3	6.0
99SPI-1	MOB990174	350895	6883517	15	filtered	-	6.4	6.2	4.0
99SPI-2	MOB990175	349732	6884943	15	filtered	-	6.2	6.2	3.8
99SPI-3	MOB990176	350750	6884039	15	filtered	-	6.2	6.2	3.9
99SPI-4	MOB990177	351670	6882871	15	filtered	-	6.1	6.2	3.8
99SPI-5	MOB990178	349262	6885450	15	filtered	-	6.5	6.2	3.8
99HAPPY-1	MOB990179	421097	6936957	15	filtered	-	4.7	6.4	8.1
99KAM-1	MOB990184	381901	6897219	15	unfiltered	3.6	-	6.3	4.7
99KAM-2	MOB990185	377242	6897498	15	unfiltered	4.2	-	6.3	4.8
99KAM-3	MOB990186	377190	6901086	15	unfiltered	8.2	-	6.5	10.7
99KAM-4	MOB990187	377719	6905809	15	unfiltered	4.7	-	6.3	4.9
99KAM-5	MOB990188	374867	6909606	15	unfiltered	4.7	-	6.3	5.7
99KAM-6	MOB990189	377381	6914460	15	unfiltered	4.5	-	6.2	3.2
99KAM-7	MOB990190	382543	6910120	15	unfiltered	4.5	-	6.3	4.3
99KAM-8	MOB990191	380427	6907992	15	unfiltered	4.4	-	6.3	4.7
99KAM-9	MOB990192	387667	6911517	15	unfiltered	5.3	-	6.4	9.2
99KAM-10	MOB990193	389586	6908195	15	unfiltered	5.1	-	6.4	7.2
99KAM-11	MOB990194	392839	6909777	15	unfiltered	4.0	-	6.4	8.7
99KAM-12	MOB990195	395400	6905248	15	unfiltered	3.1	-	6.3	5.4
99KAM-13	MOB990196	394907	6899752	15	unfiltered	3.4	-	6.3	5.8
99KAM-14	MOB990197	387813	6902215	15	unfiltered	3.9	-	6.3	5.9
99KAM-15	MOB990198	390676	6895855	15	unfiltered	3.7	-	6.3	5.7
99KAM-16	MOB990199	408654	6905500	15	unfiltered	2.8	-	6.3	6.1
99KAM-17	MOB990200	402332	6910418	15	unfiltered	2.8	-	6.3	6.1
99KAM-18	MOB990201	400198	6912201	15	unfiltered	3.0	-	6.3	5.0
99KAM-19	MOB990166	405045	6915898	15	unfiltered	2.8	-	6.3	6.2
99SPI-1	MOB990174	350895	6883517	15	unfiltered	6.3	-	6.2	4.2
99SPI-2	MOB990175	349732	6884943	15	unfiltered	5.8	-	6.2	4.5
99SPI-3	MOB990176	350750	6884039	15	unfiltered	5.6	-	6.2	3.9
99SPI-4	MOB990177	351670	6882871	15	unfiltered	5.6	-	6.2	5.0
99SPI-5	MOB990178	349262	6885450	15	unfiltered	6.0	-	6.3	4.2
99HAPPY-1	MOB990179	421097	6936957	15	unfiltered	4.2	-	6.4	8.7

Appendix XX
Lithogeochemistry
Part A: Trace Elements

Note:

Sample preparation:	pulverized to powder size (<75 µm)
Analytical digestion:	lithium meta-borate fusion; Hg with aqua regia digestion
Analytical method:	Inductively Coupled Plasma - Mass Spectrometry; Hg by Cold Vapor - Atomic Absorption Spectrometry
Laboratory:	Chemex Ltd.

Detection Limits:

Element	DL	Element	DL
Ag (ppm)	1	Pr (ppm)	0.1
Ba (ppm)	0.5	Rb (ppm)	0.2
Ce (ppm)	0.5	Sm (ppm)	0.1
Cs (ppm)	0.1	Sn (ppm)	1
Co (ppm)	0.5	Sr (ppm)	0.1
Cu (ppm)	5	Ta (ppm)	0.5
Dy (ppm)	0.1	Tb (ppm)	0.1
Er (ppm)	0.1	Th (ppm)	1
Eu (ppm)	0.1	Tl (ppm)	0.5
Gd (ppm)	0.1	Tm (ppm)	0.1
Ga (ppm)	1	U (ppm)	0.5
Hf (ppm)	1	V (ppm)	5
Hg (ppb) *in 1997:*	5	W (ppm)	1
Hg (ppb) *in 1999:*	10	Y (ppm)	0.5
Ho (ppm)	0.1	Yb (ppm)	0.1
La (ppm)	0.5	Zn (ppm)	5
Lu (ppm)	0.1	Zr (ppm)	0.5
Nb (ppm)	1		
Nd (ppm)	0.5		
Ni (ppm)	5		
Pb (ppm)	5		

Appendix XXa: Lithogeochemistry - Trace elements by ICP-MS, lithium meta-borate fusion

Sample	Station ID	Easting	Northing	UTM	Ag ppm	Ba ppm	Ce ppm	Cs ppm	Co ppm	Cu ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ga ppm	Hf ppm	Hg ppb*	Ho ppm	La ppm	Lu ppm	Nb ppm	Nd ppm	Ni ppm
ROCK97-01	97MITE-A	389500	6911539	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-02	97MITE-A	389500	6911539	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-03	97MITE-A	389500	6911539	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-04	97MITE-B	390237	6910960	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-05	97MITE-C	390567	6910751	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-06	MOB970380	391275	6909650	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-07	97MITE-D	392036	6908819	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-08	97MITE-9	394512	6906204	15	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	-	-	-	-
ROCK97-09	97MITE-Z	393450	6907300	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-10	97MITE-W	379420	6909633	15	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-
ROCK97-11	97MITE-E	379569	6909418	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-12	97MITE-AA	405200	6915700	15	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-
ROCK97-13	97MITE-AB	405300	6915500	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-14	MOB970175	392550	6909800	15	-	-	-	-	-	-	-	-	-	-	-	-	6	-	-	-	-	-	-
ROCK97-15	97MITE-AC	392834	6908959	15	-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-	-
ROCK97-16	MOB970176	415054	6921426	15	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-
ROCK97-17	MOB970377	374473	6899929	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-18	97MITE-AD	375208	6899324	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK97-19	97MITE-J	375392	6899236	15	-	-	-	-	-	-	-	-	-	-	-	-	<5	-	-	-	-	-	-
ROCK99-100	-	-	-	15	<1	292.0	25.0	0.9	53.0	25	4.1	2.4	1.1	4.3	19	3	<10	0.8	11.0	0.4	4	14.0	115
ROCK99-169	MOB990169	407108	6913055	15	<1	41.0	4.5	0.3	38.0	85	0.5	0.3	0.2	0.4	3	<1	10	0.1	3.0	<0.1	<1	2.5	45
ROCK99-174	MOB990174	350895	6883517	15	120	38.5	41.5	0.3	46.0	9340	3.7	1.4	2.8	4.5	17	9	120	0.5	19.5	0.1	9	19.5	25
ROCK99-180	MOB990180	421422	6937243	15	<1	154.0	11.0	1.8	55.0	80	1.1	0.5	0.3	0.9	8	1	40	0.1	6.0	<0.1	4	5.5	30
ROCK99-199	MOB990199	408654	6905500	15	<1	318.0	63.5	0.7	33.5	25	3.8	1.3	2.8	8.1	15	7	<10	0.5	18.0	0.1	3	55.0	40

* Hg analysed by CV-AAS, aqua regia digestion

Appendix XXa: Lithogeochemistry - Trace elements by ICP-MS, lithium meta-borate fusion

Sample	Station ID	Easting	Northing	UTM	Pb ppm	Pr ppm	Rb ppm	Sm ppm	Sn ppm	Sr ppm	Ta ppm	Tb ppm	Th ppm	Tl ppm	Tm ppm	U ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Zr ppm
ROCK97-01	97MITE-A	389500	6911539	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-02	97MITE-A	389500	6911539	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-03	97MITE-A	389500	6911539	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-04	97MITE-B	390237	6910960	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-05	97MITE-C	390567	6910751	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-06	MOB970380	391275	6909650	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-07	97MITE-D	392036	6908819	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-08	97MITE-9	394512	6906204	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-09	97MITE-Z	393450	6907300	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-10	97MITE-W	379420	6909633	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-11	97MITE-E	379569	6909418	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-12	97MITE-AA	405200	6915700	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-13	97MITE-AB	405300	6915500	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-14	MOB970175	392550	6909800	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-15	97MITE-AC	392834	6908959	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-16	MOB970176	415054	6921426	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-17	MOB970377	374473	6899929	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-18	97MITE-AD	375208	6899324	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK97-19	97MITE-J	375392	6899236	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROCK99-100	-	-	-	15	<5	3.5	16.4	3.7	<1	175.5	<0.5	0.7	1	1.5	0.3	<0.5	315	6	22.0	2.4	95	84.0
ROCK99-169	MOB990169	407108	6913055	15	185	0.7	6.0	0.6	<1	25.3	4.0	<0.1	<1	<0.5	<0.1	<0.5	25	117	2.0	0.3	135	20.0
ROCK99-174	MOB990174	350895	6883517	15	7370	5.0	2.8	3.9	1	198.0	0.5	0.7	6	0.5	0.1	1.5	15	8	13.5	1.0	7530	235.0
ROCK99-180	MOB990180	421422	6937243	15	30	1.4	16.0	0.9	<1	47.2	11.5	0.2	<1	3.5	<0.1	<0.5	50	294	5.0	0.4	215	44.0
ROCK99-199	MOB990199	408654	6905500	15	<5	11.0	43.2	12.0	1	719.0	2.0	1.0	<1	<0.5	0.1	<0.5	80	41	12.5	1.2	45	253.0

* Hg analysed by CV-AAS, aqua regia digestion

Appendix XX
Lithogeochemistry
Part B: Major and Minor Oxides

Note:

Sample preparation:	pulverized to powder size (<75 μm)
Analytical digestion:	lithium meta-borate fusion
Analytical method:	X-ray fluorescence
Laboratory:	Chemex Ltd.

Detection Limits:

Oxide	DL
Al_2O_3 (%)	0.01
CaO (%)	0.01
Cr_2O_3 (%)	0.01
Fe_2O_3 (%)	0.01
K_2O (%)	0.01
MgO (%)	0.01
MnO (%)	0.01
Na_2O (%)	0.01
P_2O_5 (%)	0.01
SiO_2 (%)	0.01
TiO_2(%)	0.01
LOI (%)	0.01

Appendix XXb: Lithogeochemistry - Major and minor oxides by XRF, lithium meta-borate fusion

Sample	Station ID	Easting	Northing	UTM	Al_2O_3 %	CaO %	Cr_2O_3 %	Fe_2O_3 %	K_2O %	MgO %	MnO %	Na_2O %	P_2O_5 %	SiO_2 %	TiO_2 %	LOI %	Total %
ROCK99-100	-	-	-	15	14.58	8.65	<0.01	13.83	1.17	7.87	0.20	1.97	0.15	47.40	1.22	1.96	99.00
ROCK99-169	MOB990169	407108	6913055	15	1.45	2.05	<0.01	1.46	0.20	0.03	0.03	<0.01	0.01	92.16	0.08	1.60	99.07
ROCK99-174	MOB990174	350895	6883517	15	12.35	3.17	<0.01	39.71	0.15	4.39	0.17	1.49	0.05	24.92	0.29	9.42	96.11
ROCK99-180	MOB990180	421422	6937243	15	5.81	0.82	<0.01	13.49	1.00	0.14	<0.01	1.00	0.03	68.37	0.20	7.91	98.77
ROCK99-199	MOB990199	408654	6905500	15	12.62	15.86	<0.01	8.22	3.04	8.85	0.10	4.32	0.03	45.53	0.84	-1.03	98.38

Appendix XX
Lithogeochemistry
Part C: Mineral occurrences

Note:

Sample preparation: pulverized to powder size (<75 µm)

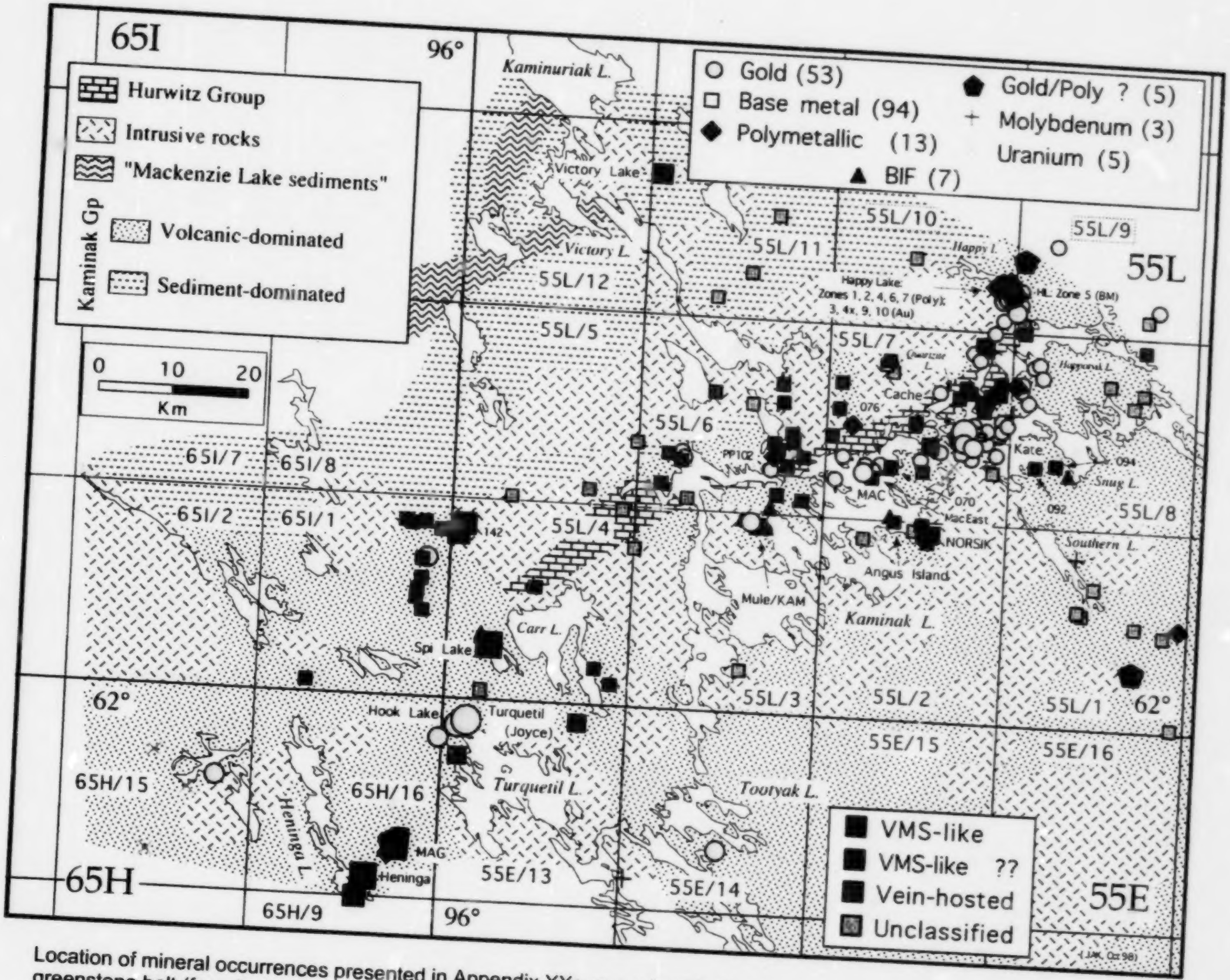
Analytical digestion: multi-acid; aqua regia for Hg; aqua regia hydride for As, Bi, Sb, Se and Ti

Analytical method: inductively coupled plasma atomic emission spectrometry; cold vapor - atomic absorption spectrometry for Hg, As, Bi, Sb, Se and Ti; lead fire assay with a AA/ICP finish for Au

Laboratory: XRAL Laboratories

Detection Limits:

Element	DL	Element	DL
Ag (ppm)	0.2	Mg (%)	0.01
Al (%)	0.01	Mn (ppm)	2
As (ppm)	0.1	Mo (ppm)	1
Au (ppb)	1	Na (%)	0.01
Ba (ppm)	1	Ni (ppm)	1
Be (ppm)	0.5	P (%)	0.01
Bi (ppm)	0.1	Pb (ppm)	2
Ca (%)	0.01	Sb (ppm)	0.1
Cd (ppm)	1	Sc (ppm)	0.5
Co (ppm)	1	Se (ppm)	0.1
Cr (ppm)	1	Sn (ppm)	10
Cu (ppm)	0.5	Sr (ppm)	0.5
Fe (%)	0.01	Ti (%)	0.01
Hg (ppb)	5	Te (ppm)	0.1
K (%)	0.01	V (ppm)	2
La (ppm)	1	W (ppm)	10
		Y (ppm)	0.5
		Zn (ppm)	0.5
		Zr (ppm)	0.5


65I
96°
Hurwitz Group
Intrusive rocks
"Mackenzie Lake sediments"
Kaminak Gp
Volcanic-dominated
Sediment-dominated
0 10 20
Km
Gold (53)
Base metal (94)
Polymetallic (13)
BIF (7)
Gold/Poly ? (5)
Molybdenum (3)
Uranium (5)
Kaminuriak L.
Victory Lake
Victory L.
55L/12
55L/11
55L/10
55L/9
55L
Happy L.
Happy Lake: Zones 1, 2, 4, 6, 7 (Poly); 3, 4x, 9, 10 (Au)
HL Zone 5 (BM)
55L/5
55L/7
Cache
076
55L/6
PP102
MAC
070
MacEast
NORSIK
Kate
094
Snug L.
092
55L/8
Southern L.
651/7
651/8
651/2
651/1
142
55L/4
Angus Island
Mule/KAM
Kaminak L.
Carr L.
Spi Lake
55L/3
55L/2
55L/1
62°
Hook Lake
Turquetil (Joyce)
Turquetil L.
55E/15
55E/16
65H/15
65H/16
Heninga L.
Tootyak L.
MAG
Heninga
65H
55E/13
55E/14
65H/9
96°
55E
VMS-like
VMS-like ??
Vein-hosted
Unclassified

Location of mineral occurrences presented in Appendix XXc, over simplified geological map of the Henik-Kaminak-Tavani greenstone belt (from Irwin et al., 1998). Mineral occurrences are shown on the map according to class and deposit type (from Goff and Kerswill, 1999).

Appendix XXc: Lithogeochemistry - Mineral Occurrences

NewID	Prefix	Sample No.	Locale	NTS Sheet	Latitude	Longitude	Sample Description	Sulphides	Deposit type	Ag ppm	Al %	As ppm	Au ppb	Ba ppm	Be ppm
1	KZ-97	SPI-1A	Spi Lake	55L04	62.0689	95.8786	felsic/intermediate volcanic	po	VMS	0.7	7.84	0.4	7	345	1.1
2	KZ-97	SPI-1B	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer+massive)	po, cpy	VMS	2.0	6.69	0.6	229	125	1.5
3	KZ-97	SPI-1C	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer+massive)	po, sp	VMS	3.2	4.35	0.5	26	49	2.0
4	KZ-97	SPI-1D	Spi Lake	55L04	62.0689	95.8786	"ore" (massive)	po, cpy, sp	VMS	5.8	3.45	0.3	35	27	2.3
5	KZ-97	SPI-1E	Spi Lake	55L04	62.0689	95.8786	quartz feldspar porphyry	po	VMS	2.0	7.19	0.7	74	470	1.1
6	KZ-97	SPI-1F	Spi Lake	55L04	62.0689	95.8786	quartz feldspar porphyry	po, py ??	VMS	0.7	7.26	1.0	26	383	1.0
7	KZ-97	SPI-2C-1	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer)	sp, ga, cpy, po	VMS	21.8	0.96	1.3	93	15	1.3
8	KZ-97	SPI-2C-2	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer)	cpy, sp	VMS	25.3	1.27	3.8	720	63	1.4
9	KZ-97	SPI-2C-3	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer)	sp, cpy, ga	VMS	23.1	1.04	5.7	243	18	0.8
10	KZ-97	SPI-2C-4	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer)	po, cpy	VMS	17.1	0.63	5.1	336	21	1.7
11	KZ-97	SPI-2C-5	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer)	cpy, sp	VMS	34.5	1.88	2.8	99	38	1.2
12	KZ-97	SPI-2C-6	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer)	sp, cpy	VMS	9.2	2.55	1.8	89	115	1.5
13	KZ-97	SPI-2F	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer)	po, sp, cpy	VMS	11.8	0.87	4.1	62	20	1.0
14	KZ-97	SPI-2G	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer)	sp, ga, po	VMS	106.0	0.81	1.0	33	17	0.9
15	KZ-97	SPI-2H	Spi Lake	55L04	62.0689	95.8786	"ore" (stringer)	sp, cpy, po ??	VMS	18.6	1.70	1.4	10	169	1.1
16	KZ-97	SPI-3-1	Spi Lake	55L04	62.0689	95.8786	pyritic exhalite	py	VMS	1.7	6.91	21.8	15	179	1.4
17	KZ-97	SPI-3-2	Spi Lake	55L04	62.0689	95.8786	pyritic exhalite	py	VMS	2.1	4.67	39.4	22	59	2.1
18	KZ-97	HL-1-1-1	Happy Lake, Zone 1	55L10	62.5556	94.5325	quartz sericite schist	py, sp	Polymetallic vein	1.8	4.58	377.0	1690	226	1.1
19	KZ-97	HL-1-1-2	Happy Lake, Zone 1	55L10	62.5556	94.5325	quartz sericite schist	py, sp	Polymetallic vein	1.1	4.34	169.0	898	244	0.6
20	KZ-97	HL-1-2-1	Happy Lake, Zone 1	55L10	62.5556	94.5325	quartz sericite schist	py	Polymetallic vein	1.0	5.79	170.0	973	373	0.6
21	KZ-97	HL-1-2-2	Happy Lake, Zone 1	55L10	62.5556	94.5325	quartz sericite schist	py	Polymetallic vein	2.7	2.36	270.0	7210	116	0.6
22	KZ-97	HL-1-11-1	Happy Lake, Zone 1	55L10	62.5556	94.5325	felsic tuff	po	Polymetallic vein	0.7	7.96	0.6	375	453	1.0
23	KZ-97	HL-1-11-2	Happy Lake, Zone 1	55L10	62.5556	94.5325	felsic tuff	po	Polymetallic vein	0.8	8.09	0.7	<1	489	0.8
24	KZ-97	HL-1-11-3	Happy Lake, Zone 1	55L10	62.5556	94.5325	felsic tuff	po	Polymetallic vein	0.8	7.63	1.2	111	518	0.7
25	KZ-97	HL-2X-1	Happy Lake, Zone 2	55L10	62.5542	94.5247	felsic tuff	po, cpy	Polymetallic vein	1.8	5.39	2.6	5850	302	1.1
26	KZ-97	HL-2X-2	Happy Lake, Zone 2	55L10	62.5542	94.5247	felsic tuff	po, cpy	Polymetallic vein	1.0	7.16	0.9	174	216	1.2
27	KZ-97	HL-2X-3	Happy Lake, Zone 2	55L10	62.5542	94.5247	felsic tuff	po, cpy	Polymetallic vein	2.3	2.31	6.6	450	150	1.7
28	KZ-97	HL-2X-4	Happy Lake, Zone 2	55L10	62.5542	94.5247	felsic tuff	po, cpy, sp	Polymetallic vein	1.7	3.28	2.2	5350	128	1.5
29	KZ-97	HL-2X-5	Happy Lake, Zone 2	55L10	62.5542	94.5247	felsic tuff	po, cpy, sp	Polymetallic vein	2.3	4.30	1.7	1980	169	1.5
30	KZ-97	HL-2X-6	Happy Lake, Zone 2	55L10	62.5542	94.5247	felsic tuff	po, cpy	Polymetallic vein	2.2	0.69	8.0	1630	25	1.8
31	KZ-97	HL-3-2	Happy Lake, Zone 3	55L10	62.5453	94.5233	felsic tuff	po, py, cpy	Polymetallic vein	0.9	7.55	1.0	30	601	0.8
32	KZ-97	HL-3-3	Happy Lake, Zone 3	55L10	62.5453	94.5233	felsic tuff	po, py, cpy	Polymetallic vein	0.4	8.20	<0.1	6	1230	0.8
33	KZ-97	HL-3-4-1	Happy Lake, Zone 3	55L10	62.5453	94.5233	felsic tuff	po, py, cpy	Polymetallic vein	0.6	7.79	0.7	173	526	1.3
34	KZ-97	HL-3-4-2	Happy Lake, Zone 3	55L10	62.5453	94.5233	felsic tuff	po, py, cpy	Polymetallic vein	0.6	1.72	0.2	579	138	<0.5
35	KZ-97	HL-3-4-3	Happy Lake, Zone 3	55L10	62.5453	94.5233	felsic tuff	po, py, cpy	Polymetallic vein	1.5	5.75	0.3	1080	474	1.1
36	KZ-97	HL-3E-2	Happy Lake, Zone 3	55L10	62.5453	94.5233	quartz vein	py	Polymetallic vein	0.9	4.81	0.3	1360	278	0.8
37	KZ-97	HL-4-2-1	Happy Lake, Zone 4	55L10	62.5450	94.5156	felsic tuff/quartz vein	sp, py, cpy	Polymetallic vein	2.1	6.03	44.8	2010	181	0.9
38	KZ-97	HL-4-2-2	Happy Lake, Zone 4	55L10	62.5450	94.5156	felsic tuff/quartz vein	sp, py, cpy	Polymetallic vein	2.6	3.13	26.1	1750	74	0.6
39	KZ-97	HL-4-2-3	Happy Lake, Zone 4	55L10	62.5450	94.5156	felsic tuff/quartz vein	sp, py, cpy	Polymetallic vein	9.5	0.58	958.0	16300	15	1.6
40	KZ-97	HL-4-2-4	Happy Lake, Zone 4	55L10	62.5450	94.5156	felsic tuff/quartz vein	sp, py, cpy	Polymetallic vein	12.6	0.84	1150.0	44600	18	0.9
41	KZ-97	HL-4-3-1	Happy Lake, Zone 4	55L10	62.5450	94.5156	felsic tuff/quartz vein	py, sp	Polymetallic vein	6.0	0.48	461.0	39200	18	1.8
42	KZ-97	HL-4-3-2	Happy Lake, Zone 4	55L10	62.5450	94.5156	felsic tuff/quartz vein	py, sp	Polymetallic vein	3.6	0.06	1360.0	14800	2	2.7
43	KZ-97	HL-4-4	Happy Lake, Zone 4	55L10	62.5450	94.5156	felsic tuff/quartz vein	py, sp	Polymetallic vein	2.1	0.87	7.4	4750	49	<0.5
44	KZ-97	AI-1-1	Angus Island	55L02	62.2486	94.8172	agglomerate/breccia	cpy, sp	VMS ??	2.5	4.98	6.3	16	23	1.6
45	KZ-97	AI-1-3	Angus Island	55L02	62.2486	94.8172	agglomerate/breccia	cpy, sp	VMS ??	9.5	1.98	35.9	144	2	1.1
46	KZ-97	AI-1-7	Angus Island	55L02	62.2486	94.8172	agglomerate/breccia	cpy, sp	VMS ??	2.2	1.77	22.8	10	2	0.8
47	KZ-97	AI-1-9	Angus Island	55L02	62.2486	94.8172	agglomerate/breccia	cpy, sp	VMS ??	2.1	2.20	63.6	30	1	1.2
48	KZ-97	AI-2-1	Angus Island	55L02	62.2486	94.8172	agglomerate/breccia	py, po ??	VMS ??	1.4	1.74	1.0	<1	8	0.7
49	KZ-97	AI-2-2	Angus Island	55L02	62.2486	94.8172	agglomerate/breccia	py, po ??	VMS ??	1.1	2.72	0.9	<1	162	0.7
50	KZ-97	AI-3	Angus Island	55L02	62.2486	94.8172	BIF (??)	none visible	VMS ??	1.2	3.09	0.6	17	12	2.1
51	KZ-97	AI-4-1	Angus Island	55L02	62.2486	94.8172	BIF (??)	py	VMS ??	1.4	0.75	0.7	<1	15	1.0
52	KZ-97	AI-4-2	Angus Island	55L02	62.2486	94.8172	BIF (??)	py	VMS ??	1.8	1.82	0.9	<1	37	0.9
53	KZ-97	AI-5-1	Angus Island	55L02	62.2486	94.8172	BIF (??)	po ??	VMS ??	1.4	1.57	4.8	4	88	1.4

Appendix XXc: Lithogeochemistry - Mineral Occurrences

NewID	Prefix	Sample No.	Locale	NTS Sheet	Latitude	Longitude	Sample Description	Sulphides	Deposit type	Ag ppm	Al %	As ppm	Au ppb	Ba ppm	Be ppm
54	KZ-97	AI-5-2	Angus Island	55L02	62.2486	94.8172	BIF (??)	po ??	VMS ??	1.3	1.09	3.6	6	95	1.5
55	KZ-97	MU-EX-1	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	2.1	0.95	1.0	<1	146	2.8
56	KZ-97	MU-EX-2	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	1.2	0.52	0.6	<1	26	1.8
57	KZ-97	MU-EX-3	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	1.3	3.58	0.9	<1	17	1.6
58	KZ-97	MU-EX-4	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	2.0	2.78	0.7	2	6	2.6
59	KZ-97	MU-EX-5	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	2.2	2.90	1.0	3	12	2.8
60	KZ-97	MU-EX-6	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	1.1	5.53	0.8	<1	198	1.1
61	KZ-97	MU-EX-7	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	1.4	2.87	0.8	<1	13	1.6
62	KZ-97	MU-EX-8	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	3.5	1.37	0.6	18	11	2.5
63	KZ-97	MU-EX-9-1	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	0.4	0.94	0.8	<1	3	<0.5
64	KZ-97	MU-EX-9-2	Mule	55L03	62.2333	95.1667	tuff/breccia/BIF (??)	po, cpy	VMS ??	0.8	1.31	1.0	<1	4	<0.5
65	KZ-97	MU-WX-1	Mule	55L03	62.2333	95.1667	tuff/BIF (??)	po	VMS ??	0.5	0.10	0.2	<1	3	<0.5
66	KZ-97	MU-WX-2	Mule	55L03	62.2333	95.1667	tuff/BIF (??)	po	VMS ??	0.7	0.02	0.3	<1	<1.0	<0.5
67	KZ-97	MU-WX-3	Mule	55L03	62.2333	95.1667	tuff/BIF (??)	po	VMS ??	1.4	0.40	1.1	<1	12	1.9
68	KZ-97	MU-WX-4	Mule	55L03	62.2333	95.1667	tuff/BIF (??)	po	VMS ??	1.5	2.13	0.6	<1	13	3.3
69	KZ-97	MU-X-1	Mule	55L03	62.2333	95.1667	tuff/BIF (??)	po	VMS ??	1.2	0.33	0.5	<1	9	1.5
70	KZ-97	MU-X-2	Mule	55L03	62.2333	95.1667	tuff/BIF (??)	pu	VMS ??	0.8	5.71	0.5	<1	162	1.6
71	KZ-97	K-21-1-1	Kam	55L03	62.2398	95.1900	mixed BIF	po	VMS ??	1.0	0.23	0.8	<1	12	1.6
72	KZ-97	K-21-1-2	Kam	55L03	62.2398	95.1900	mixed BIF	po	VMS ??	1.5	0.37	0.9	16	17	2.3
73	KZ-97	K-21-1-3	Kam	55L03	62.2398	95.1900	mixed BIF	po	VMS ??	1.1	0.32	0.8	2	65	1.9
74	KZ-97	K-21-2-1	Kam	55L03	62.2398	95.1900	pyrrhotite-rich zone	po, cpy	VMS ??	1.0	5.35	2.0	12	14	1.7
75	KZ-97	K-21-2-2	Kam	55L03	62.2398	95.1900	pyrrhotite-rich zone	po, cpy	VMS ??	1.8	5.18	1.1	5	20	2.1
76	KZ-97	K-21-2-3	Kam	55L03	62.2398	95.1900	pyrrhotite-rich zone	po, cpy	VMS ??	1.2	4.92	0.7	4	36	2.1
77	KZ-97	K-21-2-4	Kam	55L03	62.2398	95.1900	pyrrhotite-rich zone	po, cpy	VMS ??	1.4	4.10	1.0	22	20	2.1
78	KZ-97	K-21-2-5	Kam	55L03	62.2398	95.1900	pyrrhotite-rich zone	po, cpy	VMS ??	1.3	5.51	0.7	21	22	1.9
79	KZ-97	KW-1-1	Kam	55L03	62.2398	95.1900	mixed BIF	po	VMS ??	1.4	1.58	0.7	3	42	2.3
80	KZ-97	KW-1-2	Kam	55L03	62.2398	95.1900	mixed BIF	po	VMS ??	1.1	0.37	0.2	1	81	1.8
81	KZ-97	092-1-1	92	55L08	62.3258	94.4300	tuff/breccia/BIF (??)	py	VMS ??	0.6	6.34	0.3	3	928	1.5
82	KZ-97	092-1-2	92	55L08	62.3258	94.4300	tuff/breccia/BIF (??)	py	VMS ??	0.7	6.61	0.6	2	633	1.2
83	KZ-97	092-2	92	55L08	62.3258	94.4300	"dyke" (??)	po, cpy	VMS ??	2.3	5.40	0.4	5	40	0.7
84	KZ-97	094-1-1	94	55L08	62.3250	94.3750	felsic agglomerate	po	VMS ??	0.9	7.17	0.3	<1	283	1.1
85	KZ-97	094-1-2	94	55L08	62.3250	94.3750	felsic agglomerate	po	VMS ??	0.5	7.81	0.6	<1	402	1.3
86	KZ-97	094-2-1	94	55L08	62.3250	94.3750	felsic agglomerate	po	VMS ??	0.9	7.31	0.4	13	130	1.0
87	KZ-97	094-2-2	94	55L08	62.3250	94.3750	felsic agglomerate	po	VMS ??	0.7	7.65	0.3	<1	59	1.1
88	KZ-97	094-2-3	94	55L08	62.3250	94.3750	felsic agglomerate	po	VMS ??	0.4	7.80	0.4	<1	183	1.1
89	KZ-97	094-2-4	94	55L08	62.3250	94.3750	felsic agglomerate	po	VMS ??	0.9	7.42	0.6	<1	165	0.9
90	KZ-97	SL-1	Snug Lake	55L08	62.3167	94.3333	felsic tuff (??)	po	VMS ???	0.9	7.05	0.3	<1	101	1.0
91	KZ-97	083-A	83	55L	62.2639	94.8836	quartz sericite schist	py	Vein Gold	2.2	4.62	0.6	<1	221	1.2
92	KZ-97	083-B	83	55L	62.2639	94.8836	quartz sericite schist	po	Vein Gold	1.2	6.22	0.9	<1	806	1.2
93	KZ-97	070-1-2	70	55L07	62.3267	94.8200	tuff/breccia/agglomerate	py	Vein Gold	2.8	3.66	128.0	2	81	1.5
94	KZ-97	070-1-3	70	55L07	62.3267	94.8200	tuff/breccia/agglomerate	py	Vein Gold	0.8	5.90	13.2	<1	73	0.8
95	KZ-97	070-1-4	70	55L07	62.3267	94.8200	tuff/breccia/agglomerate	py	Vein Gold	2.3	3.96	118.0	6	107	1.3
96	KZ-97	070-1-5	70	55L07	62.3267	94.8200	tuff/breccia/agglomerate	py	Vein Gold	1.0	7.52	14.3	<1	407	0.9
97	KZ-97	PHA-R140	Rainbird sample	55L	62.3408	94.7833	massive sulphide	py	VMS ???	1.6	2.32	102.0	6	116	1.3
98	KZ-97	IF-1-1A	BIF Island	55L03	62.2467	95.1292	BIF/quartz vein	py	Vein Au in BIF	0.8	0.16	1.0	<1	4	1.6
99	KZ-97	IF-1-1B	BIF Island	55L03	62.2467	95.1292	BIF/quartz vein	py	Vein Au in BIF	0.9	0.12	1.0	<1	2	1.6
100	KZ-97	IF-1-2	BIF Island	55L03	62.2467	95.1292	BIF/quartz vein	py	Vein Au in BIF	0.9	0.20	1.9	10	4	1.8
101	KZ-97	IF-1-3	BIF Island	55L03	62.2467	95.1292	BIF/quartz vein	py	Vein Au in BIF	1.1	0.19	2.1	32	6	2.3
102	KZ-97	IF-2	BIF Island	55L03	62.2467	95.1292	oxide-BIF	??	Vein Au in BIF	1.8	0.16	3.8	57	5	5.9
103	KZ-97	IF-3	BIF Island	55L03	62.2467	95.1292	felsic volcanic	none ??	Vein Au in BIF	0.7	7.47	0.8	<1	92	1.1
104	KZ-97	IF-4-1	BIF Island	55L03	62.2467	95.1292	mixed BIF	??	Vein Au in BIF	0.7	0.08	0.8	<1	13	1.4
105	KZ-97	IF-4-2	BIF Island	55L03	62.2467	95.1292	mixed BIF	??	Vein Au in BIF	0.8	0.04	1.3	10	4	1.4
106	KZ-97	KVG-1-1	Kam- "vg" Trench	55L03	62.2398	95.1900	"BIF"/tuff (??)	po	Vein Gold	1.4	1.67	0.9	13	75	2.5

Appendix XXc: Lithogeochemistry - Mineral Occurrences

NewID	Prefix	Sample No.	Locale	NTS Sheet	Latitude	Longitude	Sample Description	Sulphides	Deposit type	Ag ppm	Al %	As ppm	Au ppb	Ba ppm	Be ppm
107	KZ-97	KVG-2-1	Kam- "vg" Trench	55L03	62.2398	95.1900	magnetite breccia	po	Vein Gold	0.8	0.08	1.6	4	2	0.8
108	KZ-97	KVG-3-1	Kam- "vg" Trench	55L03	62.2398	95.1900	felsic tuff/quartz vein	py	Vein Gold	0.2	2.87	0.7	12	40	<0.5
109	KZ-97	KVG-3-2	Kam- "vg" Trench	55L03	62.2398	95.1900	felsic tuff/quartz vein	py	Vein Gold	0.7	7.93	2.1	55	139	0.8
110	KZ-97	KVG-3-3	Kam- "vg" Trench	55L03	62.2398	95.1900	felsic tuff/quartz vein	py	Vein Gold	0.8	3.55	0.9	11	35	<0.5
111	KZ-97	KVG-3-4	Kam- "vg" Trench	55L03	62.2398	95.1900	felsic tuff/quartz vein	py	Vein Gold	0.7	5.84	0.7	21	36	0.8
112	KZ-97	KVG-4-1	Kam- "vg" Trench	55L03	62.2398	95.1900	felsic tuff/quartz vein	po, py	Vein Gold	0.8	6.64	1.7	8	68	0.9
113	KZ-97	KVG-4-2	Kam- "vg" Trench	55L03	62.2398	95.1900	felsic tuff/quartz vein	po, py	Vein Gold	1.2	7.28	2.1	13	148	1.6
114	KZ-97	M-1-1	Mac Main Zone	55L07	62.3142	94.8867	complex vein	py	Vein Gold	0.6	3.68	26.0	2660	92	0.8
115	KZ-97	M-1-2	Mac Main Zone	55L07	62.3142	94.8867	complex vein	py	Vein Gold	0.7	2.63	2.5	7650	46	<0.5
116	KZ-97	M-1-3	Mac Main Zone	55L07	62.3142	94.8867	complex vein	py	Vein Gold	0.5	3.05	25.9	2660	82	0.7
117	KZ-97	M-2-1	Mac Main Zone	55L07	62.3142	94.8867	mafic volcanic	py	Vein Gold	0.5	6.06	6.5	73	35	1.3
118	KZ-97	M-2-2	Mac Main Zone	55L07	62.3142	94.8867	mafic volcanic	py	Vein Gold	0.4	6.40	5.9	65	52	1.4
119	KZ-97	M-3-1	Mac Main Zone	55L07	62.3142	94.8867	complex vein	py	Vein Gold	3.3	3.45	8.9	25400	66	1.0
120	KZ-97	M-3-4	Mac Main Zone	55L07	62.3142	94.8867	complex vein	py	Vein Gold	2.1	5.01	5.9	17000	103	1.4
121	KZ-97	M-4	Mac Main Zone	55L07	62.3142	94.8867	black shale	??	Vein Gold	0.5	7.89	6.2	<1	909	1.3
122	KZ-97	M-5-1	Mac Main Zone	55L07	62.3142	94.8867	felsic tuff (??)	py	Vein Gold	0.6	6.74	6.8	<1	544	1.1
123	KZ-97	M-5-2	Mac Main Zone	55L07	62.3142	94.8867	felsic tuff (??)	py	Vein Gold	0.5	7.20	8.6	6	625	1.1
124	KZ-97	M-6	Mac Main Zone	55L07	62.3142	94.8867	quartz vein stockwork	py	Vein Gold	5.0	4.84	13.7	64000	96	0.8
125	KZ-97	M-7-1	Mac Main Zone	55L07	62.3142	94.8867	alteration zone (carbonate)	cpy, py	Vein Gold	0.9	7.02	1.8	363	180	1.3
126	KZ-97	M-7-2	Mac Main Zone	55L07	62.3142	94.8867	alteration zone (carbonate)	cpy, py	Vein Gold	0.9	8.64	3.7	169	232	1.9
127	KZ-97	M-7-3	Mac Main Zone	55L07	62.3142	94.8867	alteration zone (carbonate)	py	Vein Gold	1.6	6.29	5.9	808	232	1.1
128	KZ-97	078-1-1	78	55L07	62.3106	94.8769	felsic dyke/quartz vein	py	Vein Gold	0.3	9.54	8.5	1100	762	2.0
129	KZ-97	078-1-2	78	55L07	62.3106	94.8769	felsic dyke/quartz vein	py	Vein Gold	1.4	9.87	15.9	1820	617	2.4
130	KZ-97	078-1-3	78	55L07	62.3106	94.8769	felsic dyke/quartz vein	py	Vein Gold	0.6	9.54	12.2	341	675	2.1
131	KZ-97	076-1-1	76	55L07	62.3264	94.8489	vein system	py	Vein Gold	0.6	5.90	2.2	8	74	0.8
132	KZ-97	076-1-2	76	55L07	62.3264	94.8489	vein system	py	Vein Gold	0.5	6.11	1.2	8	54	0.8
133	KZ-97	076-1-3	76	55L07	62.3264	94.8489	vein system	py	Vein Gold	0.7	5.67	1.5	8	50	0.9
134	KZ-97	076-1-5	76	55L07	62.3264	94.8489	vein system	py	Vein Gold	0.6	6.23	1.3	8	67	0.9
135	KZ-97	ME-1-1	77	55L07	62.3053	94.8708	laminated quartz vein	py	Vein Gold	0.8	1.26	16.3	9	129	<0.5
136	KZ-97	ME-1-2	77	55L07	62.3053	94.8708	laminated quartz vein	py	Vein Gold	0.9	0.43	11.6	23	24	<0.5
137	KZ-97	ME-1-4	77	55L07	62.3053	94.8708	sericite schist	py	Vein Gold	0.7	7.14	35.6	7	589	1.3
138	KZ-97	ME-1-5	77	55L07	62.3053	94.8708	sericite schist	py	Vein Gold	0.8	7.44	41.5	13	354	1.1
139	KZ-97	ME-1-6	77	55L07	62.3053	94.8708	sericite tuff/quartz vein	py	Vein Gold	1.1	6.41	69.5	38	511	1.2
140	KZ-97	ME-1-7	77	55L07	62.3053	94.8708	sericite tuff/quartz vein	py	Vein Gold	0.6	2.62	30.5	13	237	0.5
141	KZ-97	ME-1-8	77	55L07	62.3053	94.8708	sericite tuff/quartz vein	py	Vein Gold	0.4	5.50	23.4	6	475	0.9
142	KZ-97	ME-1-9	77	55L07	62.3053	94.8708	sericite tuff/quartz vein	py	Vein Gold	0.9	6.35	62.9	46	541	1.2

Appendix XXc: Lithogeochemistry - Mineral Occurrences

Prefix	Sample No.	Locale	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Se ppm
KZ-97	SPI-1A	Spi Lake	0.2	1.65	1	8	16	98.0	4.18	15	2.33	15	1.57	560	1	2.11	19	0.05	<2	<0.1	13.2	0.8
KZ-97	SPI-1B	Spi Lake	1.6	0.34	8	44	10	1030.0	18.70	<5	1.15	21	7.74	1160	<1	0.18	11	0.05	6	<0.1	4.4	29.7
KZ-97	SPI-1C	Spi Lake	5.9	0.21	11	100	11	461.0	24.30	<5	0.73	14	5.20	850	<1	0.07	23	0.04	16	<0.1	3.2	45.4
KZ-97	SPI-1D	Spi Lake	8.6	0.15	15	125	11	4670.0	28.50	<5	0.12	10	3.96	726	<1	0.07	30	0.04	25	<0.1	0.7	41.8
KZ-97	SPI-1E	Spi Lake	0.1	1.00	3	21	9	149.0	7.65	5	1.86	34	3.30	825	<1	1.65	18	0.01	<2	<0.1	9.9	2.7
KZ-97	SPI-1F	Spi Lake	<0.1	1.55	<1	4	15	53.5	2.13	<5	1.40	35	0.51	327	<1	3.62	6	0.05	<2	<0.1	6.6	0.3
KZ-97	SPI-2C-1	Spi Lake	<0.1	0.05	509	25	8	4910.0	19.40	823	0.23	5	0.93	840	<1	0.10	8	<0.01	23630	18.3	<0.5	2.7
KZ-97	SPI-2C-2	Spi Lake	0.8	0.45	12	29	8	19470.0	20.30	32	0.52	5	1.57	338	<1	0.04	11	<0.01	174	0.2	<0.5	28.9
KZ-97	SPI-2C-3	Spi Lake	0.4	0.03	127	12	7	5690.0	13.40	246	0.24	4	0.98	414	<1	0.09	6	<0.01	21090	14.9	1.3	3.6
KZ-97	SPI-2C-4	Spi Lake	0.2	0.03	155	59	10	9210.0	24.70	170	0.18	7	0.29	239	<1	0.25	15	<0.01	233	0.1	<0.5	5.6
KZ-97	SPI-2C-5	Spi Lake	0.4	0.09	159	39	12	20240.0	18.60	187	0.40	9	1.21	496	<1	0.60	10	<0.01	95	<0.1	1.0	6.0
KZ-97	SPI-2C-6	Spi Lake	0.6	0.49	5	45	11	6260.0	20.10	<5	1.11	2	3.32	643	<1	0.05	14	0.01	46	<0.1	1.7	38.3
KZ-97	SPI-2F	Spi Lake	<0.1	0.04	382	26	8	2520.0	16.50	596	0.23	6	0.78	642	<1	0.11	8	<0.01	9950	6.4	0.8	4.7
KZ-97	SPI-2G	Spi Lake	2.4	0.04	747	21	7	315.0	13.50	1280	0.25	4	0.71	939	<1	0.06	4	<0.01	84310	109.0	<0.5	3.0
KZ-97	SPI-2H	Spi Lake	4.1	0.96	6	7	16	11320.0	14.50	7	0.82	4	2.24	516	<1	0.11	5	<0.01	811	0.5	1.2	42.1
KZ-97	SPI-3-1	Spi Lake	4.1	0.15	3	6	7	147.0	10.40	25	3.67	31	0.70	79	<1	0.50	4	0.01	76	0.5	7.1	1.2
KZ-97	SPI-3-2	Spi Lake	3.5	0.05	2	3	7	33.6	22.60	8	2.56	14	0.35	50	<1	0.18	<1	<0.01	43	1.4	3.0	1.0
KZ-97	HL-1-1-1	Happy Lake, Zone 1	10.8	0.84	50	22	33	66.5	10.30	89	1.68	9	0.17	80	<1	1.08	58	0.03	4	0.8	5.0	3.0
KZ-97	HL-1-1-2	Happy Lake, Zone 1	4.5	0.44	13	23	29	102.0	4.61	27	3.03	7	0.16	46	<1	0.62	40	0.03	3	0.2	5.6	1.9
KZ-97	HL-1-2-1	Happy Lake, Zone 1	1.0	0.18	<1	7	12	15.5	2.09	<5	3.22	15	0.21	55	<1	0.87	9	0.02	<2	<0.1	6.8	0.4
KZ-97	HL-1-2-2	Happy Lake, Zone 1	1.7	0.10	3	5	11	51.4	4.98	109	1.35	5	0.07	33	1	0.51	8	<0.01	<2	0.1	2.1	1.1
KZ-97	HL-1-11-1	Happy Lake, Zone 1	0.2	4.26	<1	4	4	17.9	3.59	<5	1.91	12	0.75	588	<1	1.43	1	0.11	<2	<0.1	3.9	<0.1
KZ-97	HL-1-11-2	Happy Lake, Zone 1	0.6	4.41	<1	6	4	18.2	3.84	<5	2.53	13	0.78	744	<1	0.50	<1	0.10	<2	<0.1	3.5	<0.1
KZ-97	HL-1-11-3	Happy Lake, Zone 1	0.2	4.14	<1	5	7	28.3	3.61	<5	2.61	15	0.68	660	<1	0.42	<1	0.10	<2	0.5	3.4	0.2
KZ-97	HL-2X-1	Happy Lake, Zone 2	3.1	1.12	5	51	40	3200.0	11.40	10	1.36	17	0.73	228	<1	2.16	57	0.04	2	<0.1	7.0	4.8
KZ-97	HL-2X-2	Happy Lake, Zone 2	0.6	2.07	<1	14	4	547.0	4.02	<5	0.75	22	0.93	278	<1	3.64	2	0.09	<2	<0.1	8.0	0.3
KZ-97	HL-2X-3	Happy Lake, Zone 2	8.9	0.31	10	114	25	5630.0	21.40	<5	0.77	8	0.11	64	<1	0.64	122	0.01	12	<0.1	1.8	9.0
KZ-97	HL-2X-4	Happy Lake, Zone 2	4.8	0.58	60	255	32	2010.0	18.50	41	0.80	9	0.58	224	<1	1.25	105	0.02	8	<0.1	3.7	7.8
KZ-97	HL-2X-5	Happy Lake, Zone 2	3.5	0.81	31	69	39	3780.0	17.80	23	0.96	13	0.56	201	<1	1.79	109	0.03	7	<0.1	5.7	6.5
KZ-97	HL-2X-6	Happy Lake, Zone 2	4.6	0.07	10	1090	7	781.0	24.50	<5	0.30	6	0.23	200	<1	0.09	157	0.01	33	<0.1	<0.5	17.5
KZ-97	HL-3-2	Happy Lake, Zone 3	0.4	1.60	<1	15	6	204.0	4.10	<5	1.82	32	0.37	269	<1	3.38	3	0.06	<2	<0.1	4.6	1.8
KZ-97	HL-3-3	Happy Lake, Zone 3	<0.1	1.33	<1	7	10	26.6	3.40	<5	4.61	21	0.87	423	10	2.05	21	0.09	<2	<0.1	6.4	0.1
KZ-97	HL-3-4-1	Happy Lake, Zone 3	0.4	1.98	<1	9	98	47.9	4.02	<5	2.59	20	1.90	512	<1	2.55	91	0.06	<2	<0.1	11.7	0.1
KZ-97	HL-3-4-2	Happy Lake, Zone 3	1.4	3.83	<1	14	14	184.0	2.39	<5	0.78	4	0.53	536	<1	0.19	16	0.03	<2	<0.1	1.2	0.7
KZ-97	HL-3-4-3	Happy Lake, Zone 3	8.4	0.65	<1	47	36	1870.0	6.30	<5	3.41	24	0.34	131	14	1.30	57	0.04	<2	<0.1	6.7	3.4
KZ-97	HL-3E-2	Happy Lake, Zone 3	5.4	1.56	<1	63	17	546.0	5.33	<5	0.71	11	0.73	214	8	1.81	100	0.08	2	<0.1	3.6	4.4
KZ-97	HL-4-2-1	Happy Lake, Zone 4	6.9	2.03	29	52	108	949.0	6.64	105	0.62	12	1.64	354	<1	2.69	65	0.04	<2	<0.1	31.5	3.0
KZ-97	HL-4-2-2	Happy Lake, Zone 4	7.5	1.32	86	35	64	895.0	5.20	286	0.33	5	0.42	197	<1	1.54	46	0.03	<2	<0.1	15.9	3.0
KZ-97	HL-4-2-3	Happy Lake, Zone 4	31.8	0.24	38	240	12	2580.0	21.10	304	0.08	5	0.08	45	<1	0.29	74	<0.01	13	1.6	<0.5	21.3
KZ-97	HL-4-2-4	Happy Lake, Zone 4	10.2	1.80	132	105	14	6280.0	11.80	472	0.09	4	0.14	354	<1	0.41	30	<0.01	10	<0.1	0.8	9.3
KZ-97	HL-4-3-1	Happy Lake, Zone 4	6.9	0.38	108	200	13	3190.0	23.10	315	0.14	9	0.11	504	<1	0.18	79	<0.01	15	<0.1	<0.5	21.5
KZ-97	HL-4-3-2	Happy Lake, Zone 4	30.2	0.28	87	515	9	794.0	33.30	224	<0.01	5	0.03	159	<1	0.03	120	<0.01	26	0.1	<0.5	28.0
KZ-97	HL-4-4	Happy Lake, Zone 4	0.9	0.33	497	57	19	1790.0	6.71	572	0.21	3	0.10	116	<1	0.30	45	<0.01	6	<0.1	1.1	6.0
KZ-97	AI-1-1	Angus Island	2.1	7.54	17	11	7	1300.0	16.70	42	0.01	35	5.23	5010	<1	0.05	4	0.02	18	1.1	3.6	1.3
KZ-97	AI-1-3	Angus Island	4.2	11.40	58	23	6	7760.0	14.10	151	<0.01	19	4.82	7620	<1	0.02	7	<0.01	39	0.5	1.7	6.1
KZ-97	AI-1-7	Angus Island	2.8	11.60	5	12	5	658.0	10.20	8	<0.01	21	3.19	6730	<1	0.02	9	<0.01	54	0.3	2.0	2.2
KZ-97	AI-1-9	Angus Island	5.6	5.69	18	33	9	1150.0	15.90	33	<0.01	17	2.89	6510	<1	0.02	8	0.01	47	0.6	1.8	3.9
KZ-97	AI-2-1	Angus Island	0.7	12.80	3	7	5	77.6	11.50	<5	<0.01	18	1.06	11310	<1	0.02	13	<0.01	8	0.1	2.2	0.2
KZ-97	AI-2-2	Angus Island	1.6	13.00	3	7	4	48.5	11.40	<5	0.06	37	0.99	9980	<1	0.33	12	0.01	10	0.1	2.9	<0.1
KZ-97	AI-3	Angus Island	19.6	11.30	8	9	8	4.8	12.70	<5	<0.01	27	0.66	6000	<1	0.02	7	<0.01	6	<0.1	3.2	<0.1
KZ-97	AI-4-1	Angus Island	10.6	13.40	6	9	7	54.2	14.80	<5	<0.01	12	0.32	11640	<1	0.02	13	<0.01	15	0.6	<0.5	<0.1
KZ-97	AI-4-2	Angus Island	26.4	11.60	6	11	7	25.6	13.80	<5	<0.01	18	0.57	13200	<1	0.02	14	0.01	19	0.3	1.3	0.1
KZ-97	AI-5-1	Angus Island	16.2	13.10	5	8	5	13.5	12.70	8	0.26	10	1.60	15130	5	0.04	31	0.01	10	0.3	1.1	<0.1

Appendix XXc: Lithogeochemistry - Mineral Occurrences

Prefix	Sample No.	Locale	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Se ppm
KZ-97	AI-5-2	Angus Island	22.0	11.10	4	7	6	3.4	13.10	6	0.46	14	1.22	11830	5	0.15	14	<0.01	8	0.5	0.7	<0.1
KZ-97	MU-EX-1	Mule	1.4	4.74	16	105	15	1090.0	23.50	<5	0.17	33	2.57	2500	<1	0.45	30	0.13	11	<0.1	<0.5	12.4
KZ-97	MU-EX-2	Mule	1.2	2.86	10	94	12	743.0	19.60	<5	0.12	17	1.58	1730	<1	0.10	26	0.11	12	<0.1	<0.5	9.2
KZ-97	MU-EX-3	Mule	0.1	1.84	4	20	31	82.4	11.50	<5	0.17	16	1.30	2110	<1	1.09	15	0.09	6	<0.1	3.3	1.0
KZ-97	MU-EX-4	Mule	1.0	2.64	15	61	29	350.0	24.50	<5	0.03	23	1.70	2730	<1	0.18	45	0.10	16	<0.1	1.6	3.9
KZ-97	MU-EX-5	Mule	1.1	2.92	15	63	28	335.0	25.40	<5	0.03	25	1.82	3010	<1	0.22	45	0.11	17	<0.1	1.8	4.2
KZ-97	MU-EX-6	Mule	0.1	2.08	2	27	32	41.1	8.26	14	0.79	17	1.56	1340	<1	1.95	72	0.06	<2	<0.1	7.6	0.6
KZ-97	MU-EX-7	Mule	0.3	1.85	5	31	26	199.0	15.10	8	0.06	13	1.43	3040	<1	0.10	29	0.03	6	<0.1	3.1	2.5
KZ-97	MU-EX-8	Mule	1.3	1.41	23	136	17	1060.0	32.90	7	0.02	27	0.59	834	<1	0.04	88	0.04	23	<0.1	<0.5	8.5
KZ-97	MU-EX-9-1	Mule	<0.1	3.88	<1	7	17	38.7	4.68	<5	0.01	7	0.35	687	<1	0.17	7	0.02	<2	<0.1	0.9	0.5
KZ-97	MU-EX-9-2	Mule	<0.1	4.28	<1	9	16	40.0	5.39	<5	0.02	65	0.45	858	<1	0.21	7	0.03	6	<0.1	0.7	0.5
KZ-97	MU-WX-1	Mule	<0.1	1.30	2	2	7	8.6	5.20	<5	0.02	3	0.74	1920	<1	0.03	3	0.02	<2	<0.1	<0.5	<0.1
KZ-97	MU-WX-2	Mule	<0.1	0.51	2	<1.0	21	9.4	4.38	<5	<0.01	3	0.34	1300	<1	0.02	1	0.01	3	<0.1	<0.5	0.1
KZ-97	MU-WX-3	Mule	<0.1	3.79	11	9	13	119.0	22.90	<5	0.18	17	2.04	7300	<1	0.06	8	0.08	12	<0.1	<0.5	0.9
KZ-97	MU-WX-4	Mule	0.1	4.71	17	13	22	24.1	29.10	<5	0.06	26	2.91	6880	<1	0.19	11	0.19	14	<0.1	0.5	0.8
KZ-97	MU-X-1	Mule	<0.1	3.03	7	4	11	31.9	18.10	<5	0.10	12	1.94	7560	<1	0.05	7	0.11	7	<0.1	<0.5	0.2
KZ-97	MU-X-2	Mule	<0.1	3.75	<1	7	26	17.1	7.23	<5	0.61	19	0.74	1520	<1	1.10	18	0.06	<2	<0.1	6.8	0.1
KZ-97	K-21-1-1	Kam	<0.1	2.45	5	14	23	132.0	15.40	<5	0.08	11	1.83	4850	<1	0.06	13	0.13	6	<0.1	<0.5	0.7
KZ-97	K-21-1-2	Kam	<0.1	2.82	9	10	27	113.0	21.60	6	0.11	16	2.63	8050	<1	0.07	17	0.12	12	0.1	<0.5	0.8
KZ-97	K-21-1-3	Kam	<0.1	2.62	6	8	29	81.7	19.50	<5	0.11	19	2.29	6820	<1	0.16	10	0.13	7	<0.1	<0.5	0.5
KZ-97	K-21-2-1	Kam	0.2	8.28	6	21	57	447.0	16.70	<5	0.13	17	2.83	5000	<1	0.29	31	0.07	<2	<0.1	10.6	3.7
KZ-97	K-21-2-2	Kam	0.1	7.48	6	25	51	2620.0	18.50	<5	0.16	22	2.83	4460	<1	0.38	42	0.06	<2	<0.1	9.9	4.6
KZ-97	K-21-2-3	Kam	<0.1	8.08	6	14	46	603.0	17.50	<5	0.30	19	2.63	4840	<1	0.58	45	0.03	3	<0.1	9.5	3.0
KZ-97	K-21-2-4	Kam	<0.1	8.57	7	16	41	826.0	17.30	<5	0.19	27	2.46	4870	<1	0.43	32	0.07	3	0.1	8.7	3.7
KZ-97	K-21-2-5	Kam	0.1	7.42	5	14	48	789.0	15.90	<5	0.21	12	2.63	4480	<1	0.48	45	0.07	18	0.3	11.4	2.7
KZ-97	KW-1-1	Kam	0.1	3.68	12	7	23	37.6	24.90	<5	0.44	20	2.55	8410	<1	0.11	16	0.17	12	0.2	<0.5	0.5
KZ-97	KW-1-2	Kam	<0.1	3.66	10	6	18	35.6	21.80	<5	0.12	22	2.03	6800	<1	0.21	12	0.12	8	0.2	<0.5	0.3
KZ-97	092-1-1	92	0.3	2.44	3	38	41	149.0	9.65	<5	0.56	12	1.80	1740	<1	1.53	46	0.07	<2	0.3	32.4	2.1
KZ-97	092-1-2	92	<0.1	5.51	4	47	48	78.7	11.80	<5	0.45	13	2.61	2470	<1	1.11	46	0.08	<2	0.4	36.4	1.0
KZ-97	092-2	92	0.7	0.60	38	64	30	910.0	8.66	230	0.03	14	1.76	762	2	2.60	44	0.06	9	0.2	8.2	13.7
KZ-97	094-1-1	94	0.1	7.37	4	30	101	66.4	10.50	<5	0.44	21	3.53	1860	<1	2.15	82	0.07	<2	0.4	25.7	0.5
KZ-97	094-1-2	94	<0.1	4.33	3	39	121	68.1	9.88	<5	0.99	14	3.00	1430	<1	2.29	74	0.08	<2	0.3	27.4	0.4
KZ-97	094-2-1	94	<0.1	6.07	4	40	115	85.2	11.30	<5	0.29	14	3.30	1680	<1	2.12	88	0.07	4	0.2	32.1	0.8
KZ-97	094-2-2	94	<0.1	3.57	4	67	126	164.0	11.30	<5	0.11	13	3.98	1260	<1	2.52	93	0.05	<2	0.2	33.5	0.8
KZ-97	094-2-3	94	<0.1	3.55	2	29	117	56.1	8.06	7	0.13	23	2.11	959	<1	3.45	69	0.13	<2	0.4	21.4	0.1
KZ-97	094-2-4	94	<0.1	6.19	4	32	92	76.2	9.83	<5	0.42	15	3.10	1660	<1	2.00	81	0.08	<2	0.2	33.1	0.6
KZ-97	SL-1	Snug Lake	<0.1	6.15	3	53	62	165.0	8.97	<5	0.34	13	3.33	2090	<1	2.85	51	0.07	<2	0.3	40.4	1.3
KZ-97	083-A	83	2.5	1.97	<1	17	6	1460.0	5.95	<5	0.52	37	0.96	1450	<1	0.79	24	<0.01	<2	0.3	12.0	6.8
KZ-97	083-B	83	0.1	0.69	1	6	8	94.2	4.74	9	2.75	33	1.19	399	2	0.29	11	0.03	10	0.2	9.3	1.7
KZ-97	070-1-2	70	<0.1	1.04	7	50	18	122.0	18.50	47	0.96	17	0.41	196	2	0.77	63	0.04	87	16.1	3.7	1.4
KZ-97	070-1-3	70	<0.1	1.78	2	23	34	34.9	9.88	<5	0.31	16	2.00	326	<1	1.13	34	0.05	<2	1.1	45.0	0.3
KZ-97	070-1-4	70	0.2	1.45	4	48	23	129.0	16.00	42	0.98	19	0.53	317	<1	1.03	59	0.04	69	14.0	4.1	1.1
KZ-97	070-1-5	70	<0.1	2.77	<1	16	29	8.5	4.64	<5	1.51	24	1.24	556	<1	2.01	33	0.07	<2	1.5	9.3	<0.1
KZ-97	PHA-R140	Rainbird sample	1.3	0.76	8	89	12	35.9	18.60	11	0.91	10	0.63	243	1	0.06	89	0.03	20	1.7	2.8	2.3
KZ-97	IF-1-1A	BIF Island	<0.1	2.97	11	2	10	4.7	17.50	11	0.01	14	1.38	1620	<1	0.03	1	0.06	8	<0.1	<0.5	<0.1
KZ-97	IF-1-1B	BIF Island	<0.1	3.31	11	2	12	4.0	18.00	<5	<0.01	14	1.36	1640	<1	0.02	2	0.06	10	<0.1	<0.5	<0.1
KZ-97	IF-1-2	BIF Island	0.1	4.23	10	4	10	45.4	21.50	6	0.01	12	1.47	3020	<1	0.02	6	0.06	12	0.3	<0.5	0.4
KZ-97	IF-1-3	BIF Island	<0.1	0.39	15	3	11	29.5	26.90	<5	<0.01	18	0.73	1830	<1	0.02	<1	0.10	13	0.6	<0.5	0.2
KZ-97	IF-2	BIF Island	0.1	2.27	22	6	14	32.6	32.30	<5	0.11	18	2.35	4170	<1	0.04	22	0.10	25	2.2	<0.5	0.4
KZ-97	IF-3	BIF Island	<0.1	3.40	2	30	15	19.6	7.34	<5	0.30	14	2.37	796	<1	2.56	49	0.07	<2	<0.1	21.1	<0.1
KZ-97	IF-4-1	BIF Island	<0.1	0.35	8	2	10	5.3	15.00	<5	0.02	11	0.63	1660	<1	0.04	7	0.05	7	<0.1	<0.5	<0.1
KZ-97	IF-4-2	BIF Island	0.1	0.49	5	2	8	5.9	15.10	<5	0.02	7	0.76	1950	<1	0.02	7	0.03	9	0.3	<0.5	<0.1
KZ-97	KVG-1-1	Kam- "vg" Trench	<0.1	5.08	11	15	17	87.8	22.50	<5	0.36	15	2.80	6900	<1	0.34	22	0.05	11	0.2	0.9	1.0

Appendix XXc: Lithogeochemistry - Mineral Occurrences

Prefix	Sample No.	Locale	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sc ppm	Se ppm
KZ-97	KVG-2-1	Kam- "vg" Trench	<0.1	2.69	3	<1.0	7	5.0	12.20	<5	0.02	5	1.68	6770	<1	0.04	9	0.01	7	0.7	<0.5	0.3
KZ-97	KVG-3-1	Kam- "vg" Trench	<0.1	3.86	<1	6	20	7.5	2.46	<5	0.11	5	0.51	404	<1	0.54	26	0.02	<2	0.2	11.1	<0.1
KZ-97	KVG-3-2	Kam- "vg" Trench	<0.1	5.06	2	31	70	4.0	7.93	<5	0.61	12	4.44	1950	<1	1.62	143	0.07	<2	0.2	23.5	<0.1
KZ-97	KVG-3-3	Kam- "vg" Trench	<0.1	6.00	<1	12	24	4.1	3.29	<5	0.14	7	1.63	1000	<1	1.09	61	0.04	2	0.1	15.0	<0.1
KZ-97	KVG-3-4	Kam- "vg" Trench	0.1	3.71	<1	28	36	44.9	4.90	<5	0.12	8	1.47	612	1	2.60	136	0.05	<2	0.1	14.1	0.7
KZ-97	KVG-4-1	Kam- "vg" Trench	<0.1	1.32	1	59	65	44.0	9.36	<5	0.25	11	3.33	1040	<1	2.77	128	0.05	<2	0.1	14.8	0.6
KZ-97	KVG-4-2	Kam- "vg" Trench	<0.1	1.42	5	97	84	130.0	17.50	<5	1.32	27	3.01	987	<1	1.88	196	0.07	6	0.2	18.0	2.6
KZ-97	M-1-1	Mac Main Zone	0.1	7.40	1	31	17	35.1	5.33	5	0.19	5	0.68	1300	<1	2.25	22	0.03	<2	0.2	26.2	1.1
KZ-97	M-1-2	Mac Main Zone	0.1	3.37	<1	13	19	5.3	2.42	5	0.14	3	0.28	528	<1	1.92	11	0.01	<2	<0.1	8.2	1.0
KZ-97	M-1-3	Mac Main Zone	<0.1	7.43	<1	24	11	25.5	4.67	<5	0.17	4	0.62	1230	<1	1.81	18	0.02	2	0.3	20.3	0.7
KZ-97	M-2-1	Mac Main Zone	<0.1	1.95	3	58	19	175.0	11.40	<5	0.08	9	4.44	1260	<1	0.96	32	0.08	<2	0.8	46.6	0.4
KZ-97	M-2-2	Mac Main Zone	<0.1	1.41	3	57	20	90.5	11.30	<5	0.12	9	4.55	1240	<1	1.14	36	0.08	<2	0.5	48.3	0.2
KZ-97	M-3-1	Mac Main Zone	0.7	2.58	1	56	46	26.1	7.77	37	0.21	9	2.09	483	67	1.45	52	<0.01	6	0.3	22.5	2.3
KZ-97	M-3-4	Mac Main Zone	0.8	1.17	2	66	71	21.6	10.70	22	0.35	8	3.48	614	25	1.65	57	<0.01	<2	0.4	44.5	2.4
KZ-97	M-4	Mac Main Zone	0.2	0.13	<1	2	23	38.7	1.57	60	4.02	20	0.80	102	2	0.26	4	0.06	<2	<0.1	4.1	1.3
KZ-97	M-5-1	Mac Main Zone	<0.1	1.24	<1	7	10	19.5	2.62	13	1.82	25	0.60	380	<1	2.64	8	0.04	<2	<0.1	5.2	0.1
KZ-97	M-5-2	Mac Main Zone	<0.1	1.08	<1	7	13	23.7	2.61	7	2.08	30	0.61	331	<1	2.50	9	0.04	<2	<0.1	6.4	0.1
KZ-97	M-6	Mac Main Zone	0.3	7.09	1	41	32	36.0	7.04	39	0.24	6	1.18	1590	<1	3.09	40	0.01	4	0.4	25.0	2.8
KZ-97	M-7-1	Mac Main Zone	<0.1	3.78	<1	29	280	1280.0	6.65	<5	0.31	24	3.64	1110	<1	3.52	123	0.14	<2	0.2	15.4	0.3
KZ-97	M-7-2	Mac Main Zone	<0.1	2.12	2	42	259	1620.0	9.81	<5	0.48	26	4.93	671	<1	3.10	183	0.17	<2	0.3	21.7	0.3
KZ-97	M-7-3	Mac Main Zone	<0.1	2.84	<1	19	24	37.2	2.91	<5	0.40	11	1.01	605	1	5.06	29	0.04	<2	0.1	5.4	0.8
KZ-97	078-1-1	78	0.6	0.70	<1	6	6	33.9	2.80	<5	1.76	68	0.37	125	2	6.28	4	0.05	<2	0.3	<0.5	1.1
KZ-97	078-1-2	78	1.4	1.00	<1	6	3	11.1	2.43	13	2.12	69	0.21	112	1	6.05	3	0.03	<2	0.8	<0.5	0.5
KZ-97	078-1-3	78	0.7	0.90	<1	6	3	21.7	2.40	18	1.58	71	0.18	126	<1	6.55	4	0.03	<2	0.4	<0.5	0.8
KZ-97	076-1-1	76	<0.1	5.96	<1	28	57	45.7	5.76	<5	0.08	17	1.67	1180	12	4.65	71	0.09	<2	2.6	16.1	<0.1
KZ-97	076-1-2	76	<0.1	6.57	<1	25	41	2.6	5.42	<5	0.19	14	2.08	1390	<1	4.69	58	0.11	<2	0.6	17.3	<0.1
KZ-97	076-1-3	76	<0.1	6.95	2	32	47	12.3	7.06	<5	0.12	14	2.32	1480	<1	4.16	83	0.12	<2	0.8	18.6	<0.1
KZ-97	076-1-5	76	<0.1	6.34	1	30	48	4.3	6.12	<5	0.23	15	2.12	1390	<1	4.58	68	0.12	<2	0.7	17.6	<0.1
KZ-97	ME-1-1	Mac East Zone	0.2	1.27	<1	7	16	11.3	1.06	<5	0.46	3	0.22	133	<1	0.26	18	0.02	5	0.2	3.1	0.3
KZ-97	ME-1-2	Mac East Zone	1.3	1.42	<1	6	9	4.1	0.55	<5	0.09	4	0.12	112	<1	0.24	8	<0.01	90	0.6	0.7	0.4
KZ-97	ME-1-4	Mac East Zone	<0.1	3.01	1	28	76	52.4	6.26	<5	2.10	14	2.40	673	<1	1.09	75	0.07	2	1.1	19.6	<0.1
KZ-97	ME-1-5	Mac East Zone	0.1	2.58	1	35	81	48.2	7.48	<5	1.30	15	2.63	840	<1	2.25	70	0.08	11	1.0	25.9	0.3
KZ-97	ME-1-6	Mac East Zone	0.1	5.09	<1	43	89	98.6	5.74	<5	1.95	61	1.67	893	<1	1.51	77	0.08	13	1.5	23.7	0.5
KZ-97	ME-1-7	Mac East Zone	0.1	9.50	<1	23	26	45.3	2.27	<5	0.93	17	0.55	857	<1	0.54	41	0.04	8	0.8	12.7	0.3
KZ-97	ME-1-8	Mac East Zone	<0.1	3.29	<1	17	50	33.4	2.75	<5	1.68	17	1.12	595	<1	1.74	46	0.05	<2	0.4	9.7	0.1
KZ-97	ME-1-9	Mac East Zone	0.1	4.17	<1	40	83	61.2	4.62	<5	2.06	13	1.28	695	<1	1.52	74	0.07	19	1.3	18.8	0.6

Appendix XXc: Lithogeochemistry - Mineral Occurrences

Prefix	Sample No.	Locale	Sn	Sr	Ti	Te	V	W	Y	Zn	Zr
			ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
KZ-97	SPI-1A	Spi Lake	<10	154.0	0.32	0.4	96	<10	27.9	90.8	118.0
KZ-97	SPI-1B	Spi Lake	<10	5.3	0.21	0.9	32	<10	65.9	631.0	177.0
KZ-97	SPI-1C	Spi Lake	<10	2.7	0.16	1.3	55	<10	26.5	339.0	107.0
KZ-97	SPI-1D	Spi Lake	<10	1.1	0.10	1.9	37	<10	20.9	436.0	84.1
KZ-97	SPI-1E	Spi Lake	<10	56.7	0.18	0.5	16	<10	23.8	190.0	331.0
KZ-97	SPI-1F	Spi Lake	<10	191.0	0.35	0.1	20	<10	17.7	87.7	208.0
KZ-97	SPI-2C-1	Spi Lake	<10	1.8	0.03	0.3	21	<10	2.5	22700.0	25.8
KZ-97	SPI-2C-2	Spi Lake	<10	13.0	0.04	0.5	22	<10	4.5	2860.0	30.0
KZ-97	SPI-2C-3	Spi Lake	<10	1.5	0.04	0.1	16	<10	2.5	55400.0	30.2
KZ-97	SPI-2C-4	Spi Lake	<10	2.7	0.02	0.2	36	<10	1.7	63700.0	21.9
KZ-97	SPI-2C-5	Spi Lake	<10	6.5	0.07	0.2	28	<10	4.3	64800.0	56.2
KZ-97	SPI-2C-6	Spi Lake	<10	11.2	0.08	0.5	29	<10	6.7	1450.0	51.2
KZ-97	SPI-2F	Spi Lake	<10	1.8	0.03	0.1	34	<10	2.4	16900.0	24.8
KZ-97	SPI-2G	Spi Lake	<10	1.1	0.02	0.3	19	<10	2.2	30800.0	21.2
KZ-97	SPI-2H	Spi Lake	<10	15.4	0.06	0.7	20	<10	5.7	2300.0	37.7
KZ-97	SPI-3-1	Spi Lake	<10	10.0	0.16	0.2	13	<10	16.2	1210.0	282.0
KZ-97	SPI-3-2	Spi Lake	<10	4.6	0.10	0.2	21	<10	8.2	129.0	200.0
KZ-97	HL-1-1-1	Happy Lake, Zone 1	<10	49.9	0.19	2.2	66	<10	3.9	9180.0	50.2
KZ-97	HL-1-1-2	Happy Lake, Zone 1	<10	53.5	0.20	0.7	57	<10	4.0	2080.0	48.4
KZ-97	HL-1-2-1	Happy Lake, Zone 1	<10	29.5	0.22	0.1	64	<10	2.5	130.0	71.5
KZ-97	HL-1-2-2	Happy Lake, Zone 1	<10	23.4	0.07	0.1	36	<10	1.3	401.0	33.6
KZ-97	HL-1-11-1	Happy Lake, Zone 1	<10	128.0	0.26	<0.1	11	<10	13.3	77.6	69.2
KZ-97	HL-1-11-2	Happy Lake, Zone 1	<10	101.0	0.26	0.3	10	<10	11.5	74.3	65.4
KZ-97	HL-1-11-3	Happy Lake, Zone 1	<10	90.4	0.24	<0.1	11	<10	9.1	72.1	66.5
KZ-97	HL-2X-1	Happy Lake, Zone 2	<10	78.0	0.22	0.3	80	<10	6.5	367.0	53.3
KZ-97	HL-2X-2	Happy Lake, Zone 2	<10	188.0	0.27	0.3	32	<10	18.8	84.1	136.0
KZ-97	HL-2X-3	Happy Lake, Zone 2	<10	22.7	0.09	0.9	49	<10	2.7	235.0	28.1
KZ-97	HL-2X-4	Happy Lake, Zone 2	<10	48.9	0.13	0.9	59	<10	3.9	6360.0	34.4
KZ-97	HL-2X-5	Happy Lake, Zone 2	<10	58.1	0.18	0.7	73	<10	6.5	3340.0	42.7
KZ-97	HL-2X-6	Happy Lake, Zone 2	<10	10.1	0.03	1.3	30	<10	2.0	115.0	17.5
KZ-97	HL-3-2	Happy Lake, Zone 3	<10	92.2	0.22	0.2	15	<10	15.9	32.7	135.0
KZ-97	HL-3-3	Happy Lake, Zone 3	<10	90.1	0.30	<0.1	44	<10	11.0	60.3	77.0
KZ-97	HL-3-4-1	Happy Lake, Zone 3	<10	207.0	0.33	<0.1	94	<10	10.5	172.0	89.3
KZ-97	HL-3-4-2	Happy Lake, Zone 3	<10	34.7	0.05	<0.1	11	<10	6.9	45.8	19.8
KZ-97	HL-3-4-3	Happy Lake, Zone 3	<10	110.0	0.23	0.5	66	<10	5.3	34.0	51.2
KZ-97	HL-3E-2	Happy Lake, Zone 3	<10	141.0	0.15	0.9	32	<10	7.0	41.9	33.8
KZ-97	HL-4-2-1	Happy Lake, Zone 4	<10	320.0	0.59	0.7	277	<10	15.0	3880.0	22.9
KZ-97	HL-4-2-2	Happy Lake, Zone 4	<10	185.0	0.31	0.8	141	<10	8.4	9800.0	15.2
KZ-97	HL-4-2-3	Happy Lake, Zone 4	<10	41.2	0.03	2.0	26	<10	1.3	4090.0	11.8
KZ-97	HL-4-2-4	Happy Lake, Zone 4	<10	61.2	0.04	1.0	26	<10	2.3	15200.0	10.4
KZ-97	HL-4-3-1	Happy Lake, Zone 4	<10	7.5	0.02	1.6	27	<10	2.8	10200.0	12.7
KZ-97	HL-4-3-2	Happy Lake, Zone 4	<10	0.7	<0.01	2.3	33	<10	1.2	7550.0	11.3
KZ-97	HL-4-4	Happy Lake, Zone 4	<10	27.4	0.04	0.4	21	<10	1.3	41900.0	10.5
KZ-97	AI-1-1	Angus Island	<10	56.2	0.03	0.3	12	<10	21.9	4160.0	237.0
KZ-97	AI-1-3	Angus Island	<10	78.0	0.01	0.5	9	<10	15.9	15500.0	97.6
KZ-97	AI-1-7	Angus Island	<10	66.2	0.01	0.2	6	<10	11.3	912.0	103.0
KZ-97	AI-1-9	Angus Island	<10	33.4	0.04	0.3	10	<10	10.7	4370.0	128.0
KZ-97	AI-2-1	Angus Island	<10	122.0	0.02	0.1	7	<10	9.9	265.0	110.0
KZ-97	AI-2-2	Angus Island	<10	144.0	0.03	0.3	7	<10	12.6	362.0	157.0
KZ-97	AI-3	Angus Island	<10	111.0	0.07	2.6	8	<10	24.5	302.0	104.0
KZ-97	AI-4-1	Angus Island	<10	91.1	0.02	1.2	10	<10	10.5	184.0	42.5
KZ-97	AI-4-2	Angus Island	<10	84.9	0.04	1.5	9	<10	12.4	343.0	91.1
KZ-97	AI-5-1	Angus Island	<10	69.2	0.03	1.1	12	<10	12.6	194.0	54.7

Appendix XXc: Lithogeochemistry - Mineral Occurrences

Prefix	Sample No.	Locale	Sn ppm	Sr ppm	Tl %	Te ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
KZ-97	AI-5-2	Angus Island	<10	53.6	0.03	1.2	8	<10	10.1	140.0	44.6
KZ-97	MU-EX-1	Mule	<10	11.1	0.03	0.9	23	<10	15.9	135.0	25.7
KZ-97	MU-EX-2	Mule	<10	5.7	0.02	0.7	15	<10	9.9	88.9	17.4
KZ-97	MU-EX-3	Mule	<10	52.2	0.13	0.3	37	<10	10.5	99.5	76.7
KZ-97	MU-EX-4	Mule	<10	57.3	0.11	0.5	39	<10	10.7	117.0	62.4
KZ-97	MU-EX-5	Mule	<10	59.8	0.11	0.5	41	<10	11.8	122.0	65.5
KZ-97	MU-EX-6	Mule	<10	134.0	0.23	0.2	62	<10	11.2	117.0	101.0
KZ-97	MU-EX-7	Mule	<10	66.6	0.11	0.3	38	<10	7.0	123.0	58.4
KZ-97	MU-EX-8	Mule	<10	46.0	0.05	0.8	34	<10	5.7	68.5	29.1
KZ-97	MU-EX-9-1	Mule	<10	29.8	0.03	0.1	10	<10	4.3	25.3	22.3
KZ-97	MU-EX-9-2	Mule	<10	32.6	0.04	0.4	12	<10	5.4	38.9	23.2
KZ-97	MU-WX-1	Mule	<10	2.4	<0.01	0.3	4	<10	0.9	30.2	2.4
KZ-97	MU-WX-2	Mule	<10	1.6	<0.01	0.2	3	<10	0.7	21.6	0.3
KZ-97	MU-WX-3	Mule	<10	9.2	0.02	0.5	17	<10	3.5	77.6	13.0
KZ-97	MU-WX-4	Mule	<10	12.0	0.09	0.5	39	<10	15.9	164.0	47.7
KZ-97	MU-X-1	Mule	<10	8.5	0.01	0.3	13	<10	3.9	72.9	10.7
KZ-97	MU-X-2	Mule	<10	90.2	0.23	0.1	57	<10	9.7	65.6	110.0
KZ-97	K-21-1-1	Kam	<10	6.1	<0.01	0.4	14	<10	6.0	260.0	8.9
KZ-97	K-21-1-2	Kam	<10	6.8	0.01	0.3	18	<10	6.3	293.0	11.2
KZ-97	K-21-1-3	Kam	<10	7.6	0.01	0.3	15	<10	6.2	266.0	12.8
KZ-97	K-21-2-1	Kam	<10	82.8	0.26	0.3	88	<10	12.0	120.0	76.4
KZ-97	K-21-2-2	Kam	<10	71.6	0.25	0.6	88	<10	15.6	153.0	76.6
KZ-97	K-21-2-3	Kam	<10	54.5	0.23	0.4	81	<10	12.2	151.0	81.9
KZ-97	K-21-2-4	Kam	<10	53.1	0.20	0.3	73	<10	19.2	149.0	73.9
KZ-97	K-21-2-5	Kam	<10	68.6	0.34	0.7	94	<10	13.2	143.0	78.3
KZ-97	KW-1-1	Kam	<10	5.7	0.05	0.4	30	<10	10.0	116.0	34.1
KZ-97	KW-1-2	Kam	<10	7.0	0.01	0.3	18	<10	5.0	88.9	16.0
KZ-97	092-1-1	92	<10	75.6	0.89	0.3	331	<10	18.9	263.0	97.5
KZ-97	092-1-2	92	<10	86.4	0.99	0.3	386	<10	30.7	268.0	52.0
KZ-97	092-2	92	12	29.1	0.24	0.6	61	<10	12.7	11500.0	127.0
KZ-97	094-1-1	94	<10	141.0	0.67	0.2	234	<10	21.8	191.0	60.3
KZ-97	094-1-2	94	<10	125.0	0.78	0.2	261	<10	20.9	171.0	92.3
KZ-97	094-2-1	94	<10	193.0	0.74	0.2	286	<10	25.8	193.0	42.9
KZ-97	094-2-2	94	<10	120.0	0.78	0.2	303	<10	17.2	155.0	38.8
KZ-97	094-2-3	94	<10	230.0	0.74	0.4	208	<10	19.0	133.0	88.9
KZ-97	094-2-4	94	<10	205.0	0.78	0.3	283	<10	26.8	185.0	43.2
KZ-97	SL-1	Snug Lake	<10	121.0	0.93	0.3	383	<10	29.8	411.0	75.2
KZ-97	083-A	83	<10	57.9	0.03	0.4	29	<10	20.5	338.0	246.0
KZ-97	083-B	83	<10	80.0	0.23	0.4	34	<10	36.9	310.0	267.0
KZ-97	070-1-2	70	<10	69.1	0.05	0.5	64	<10	4.4	112.0	65.8
KZ-97	070-1-3	70	<10	73.5	0.07	0.2	131	<10	7.8	332.0	111.0
KZ-97	070-1-4	70	<10	79.9	0.06	0.3	64	<10	5.0	124.0	73.4
KZ-97	070-1-5	70	<10	156.0	0.12	<0.1	97	<10	9.0	85.2	136.0
KZ-97	PHA-R140	Rainbird sample	<10	26.5	0.13	0.6	55	<10	4.1	468.0	33.9
KZ-97	IF-1-1A	BIF Island	<10	31.7	<0.01	0.5	13	<10	3.8	43.6	7.6
KZ-97	IF-1-1B	BIF Island	<10	32.5	<0.01	0.4	13	<10	3.9	39.0	8.1
KZ-97	IF-1-2	BIF Island	<10	51.3	0.01	0.2	19	<10	5.0	63.1	10.7
KZ-97	IF-1-3	BIF Island	<10	6.4	0.01	0.2	23	<10	3.6	67.8	12.5
KZ-97	IF-2	BIF Island	<10	26.8	<0.01	0.7	30	<10	4.2	140.0	13.8
KZ-97	IF-3	BIF Island	<10	132.0	0.37	0.5	199	<10	12.8	116.0	103.0
KZ-97	IF-4-1	BIF Island	<10	3.7	<0.01	0.5	10	<10	1.7	43.8	4.7
KZ-97	IF-4-2	BIF Island	<10	3.9	<0.01	0.3	11	<10	1.7	46.9	3.3
KZ-97	KVG-1-1	Kam- "vg" Trench	<10	7.1	0.06	0.4	32	<10	7.0	160.0	32.9

Appendix XXc: Lithogeochemistry - Mineral Occurrences

Prefix	Sample No.	Locale	Sn ppm	Sr ppm	Ti %	Te ppm	V ppm	W ppm	Y ppm	Zn ppm	Zr ppm
KZ-97	KVG-2-1	Kam- "vg" Trench	<10	3.0	<0.01	0.2	10	<10	2.8	90.0	5.0
KZ-97	KVG-3-1	Kam- "vg" Trench	<10	110.0	0.11	0.1	107	<10	7.9	29.2	11.7
KZ-97	KVG-3-2	Kam- "vg" Trench	<10	104.0	0.50	0.1	197	<10	16.6	263.0	54.6
KZ-97	KVG-3-3	Kam- "vg" Trench	<10	62.5	0.23	<0.1	91	<10	10.7	94.5	25.3
KZ-97	KVG-3-4	Kam- "vg" Trench	<10	149.0	0.31	0.1	136	<10	10.1	66.4	40.7
KZ-97	KVG-4-1	Kam- "vg" Trench	<10	63.8	0.36	0.2	127	<10	9.5	186.0	60.7
KZ-97	KVG-4-2	Kam- "vg" Trench	<10	77.9	0.39	0.3	156	<10	11.2	177.0	72.0
KZ-97	M-1-1	Mac Main Zone	<10	116.0	0.52	0.5	179	33	11.4	46.2	42.4
KZ-97	M-1-2	Mac Main Zone	<10	52.7	0.19	0.5	62	<10	7.3	23.2	17.1
KZ-97	M-1-3	Mac Main Zone	<10	114.0	0.36	0.4	143	32	7.8	42.2	33.2
KZ-97	M-2-1	Mac Main Zone	<10	22.5	1.04	0.2	396	<10	22.9	155.0	78.6
KZ-97	M-2-2	Mac Main Zone	<10	16.4	1.08	0.1	407	22	26.5	163.0	67.9
KZ-97	M-3-1	Mac Main Zone	<10	37.5	0.61	1.7	177	17	14.1	54.7	47.3
KZ-97	M-3-4	Mac Main Zone	<10	18.9	0.84	3.0	328	20	14.7	89.3	64.3
KZ-97	M-4	Mac Main Zone	<10	25.1	0.12	0.3	32	<10	7.1	41.0	95.5
KZ-97	M-5-1	Mac Main Zone	<10	68.2	0.16	0.2	37	<10	9.5	236.0	152.0
KZ-97	M-5-2	Mac Main Zone	<10	64.4	0.18	0.2	44	<10	11.3	108.0	172.0
KZ-97	M-6	Mac Main Zone	<10	160.0	0.46	0.9	179	16	13.6	48.3	35.7
KZ-97	M-7-1	Mac Main Zone	<10	252.0	0.33	0.2	226	32	8.0	157.0	69.7
KZ-97	M-7-2	Mac Main Zone	<10	165.0	0.38	0.2	388	13	8.4	269.0	95.0
KZ-97	M-7-3	Mac Main Zone	<10	227.0	0.10	0.8	46	<10	3.9	26.0	55.3
KZ-97	078-1-1	78	<10	98.6	0.09	0.2	52	<10	4.7	47.4	24.9
KZ-97	078-1-2	78	<10	87.7	0.09	0.8	65	<10	8.8	30.7	102.0
KZ-97	078-1-3	78	<10	100.0	0.08	0.4	57	<10	11.3	83.4	128.0
KZ-97	076-1-1	76	<10	255.0	0.39	<0.1	149	<10	8.1	63.8	87.4
KZ-97	076-1-2	76	<10	173.0	0.24	<0.1	117	<10	8.7	51.7	55.3
KZ-97	076-1-3	76	<10	199.0	0.34	<0.1	156	<10	12.4	73.2	91.2
KZ-97	076-1-5	76	<10	160.0	0.32	0.2	149	<10	9.4	73.7	82.9
KZ-97	ME-1-1	Mac East Zone	<10	69.2	0.03	0.2	26	<10	2.1	62.4	15.7
KZ-97	ME-1-2	Mac East Zone	<10	58.5	0.01	0.6	7	<10	1.5	85.1	6.2
KZ-97	ME-1-4	Mac East Zone	<10	167.0	0.38	0.3	165	<10	7.7	159.0	106.0
KZ-97	ME-1-5	Mac East Zone	<10	200.0	0.38	0.2	208	<10	7.7	170.0	112.0
KZ-97	ME-1-6	Mac East Zone	<10	225.0	0.18	0.2	171	<10	9.0	111.0	101.0
KZ-97	ME-1-7	Mac East Zone	<10	358.0	0.09	0.1	81	<10	10.6	45.4	42.3
KZ-97	ME-1-8	Mac East Zone	<10	223.0	0.20	<0.1	82	<10	7.2	39.9	87.2
KZ-97	ME-1-9	Mac East Zone	<10	199.0	0.19	0.1	168	<10	7.0	63.9	102.0

Appendix XXI: SEM examination of selected mineral occurrences

by S. Douma (MRD)

HAPPY LAKE

KZ-HL-1-1-1

Bi,Te inclusions (approx. 1 μm in size) associated with AuAg inclusion in pyrite
Bi inclusion (size < 1 μm) in pyrite
Bi,Cu,Te inclusion in pyrite
Pb,Bi inclusion (size 0.5 μm) in pyrite
AuAg (5-10% Ag) inclusion in pyrite
AuAg10% inclusions (size 7.5x6 μm) in pyrite
arsenopyrite (size = 2 μm) associated with Bi,Te inclusion, in pyrite
monazite inclusion in pyrite

KZ-HL-4-2-3

Bi inclusions (size = 2 μm), associated with some Ag, in pyrite
Au (with no Ag associated) found as 1 μm rounded inclusions in pyrite
AuAg inclusion (size = 3 μm) in pyrite

KZ-HL-4-2-4(a)

random pyrite and sphalerite grains checked for Hg content - none was found
galena inclusions in pyrite and sphalerite
allanite inclusion in epidote
Ag-Au in pyrite
AgTe in pyrite
arsenopyrite in pyrite
AuAg and AgS intergrown as a grain in a quartz fracture (size 12 μm x 10 μm)
Bi inclusions (< 1 μm up to 2 μm) in chalcopyrite
Bi inclusion (2 μm) in sphalerite
$Au_{60\%}Ag_{40\%}$ inclusion (size = 20 μm) in outer rim of sphalerite (note: sphalerite and AuAg were checked for Hg as solid solution with these phases and nothing was found)

KZ-HL-4-3-1

$Au_{90\%}Ag_{10\%}$ inclusion (size 10 μm) in pyrite
$AuAg_{(5\text{-}10\%)}$ inclusion (size 1μm) in pyrite
arsenopyrite inclusions (1-2 μm) in pyrite
Bi,Te inclusion (size 5 μm) in pyrite (along fractures)
Bi inclusion in pyrite (size = 3-20 μm), occurs along fractures in pyrite grain
galena
groundmass contains potassic feldspar (with albite exsolutions), muscovite

SPI LAKE

KZ-SPI-2C-1(b)

alot of f.g. galena in sphalerite, pyrrhotite, + disseminated in groundmass
rutile
apatite
Ag,S (size= approx. 30 μm), associated with pyrrhotite

KZ-SPI-2F(a)

f.g. galena inclusions in sulphides

KZ-SPI-2G

Microprobe: wave scan probe
- on one sphalerite grain (one probe) - results showed no Hg within sphalerite (detection limit approx. 0.0025 %)
- one analyses on AgS grain - found no Hg (detection limit 0.0025%)

SEM results:
galena, associated with sphalerite and pyrite (no Hg found in pyrite or sphalerite or galena)
three detailed scans across sphalerite -pyrrhotite grains showed no Hg within these 2 phases
AgS phase (size 20 µm by 1 µm) found in crack of sphalerite - a microprobe wavescan was done on this grain and it detected no Hg

ANGUS ISLAND (KAMINAK LAKE)

KZ-AI-1-4

groundmass contains dolomite
trace monazite grains (5 µm to 30 µm) in qtz and dolomite and sphalerite
tr Bi (1µm) in dolomite
AgS inclusion (size = 2 µm) in sphalerite
trace galena (1 µm) in dolomite and in sphalerite
Sn -oxide (f.g. disseminated) found in Zn-oxide compound

Appendix XXII
Analytical Quality Control
Part A: Duplicates - Data

Appendix XXIIa: Analytical Quality Control
Duplicates - Data

LABORATORY DUPLICATES

1) Appendix VIII
Till geochemistry (<2 mm); by ICP-AES, Aqua Regia Leach

Sample Number		Ag (ppm)		Al (%)		As (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)	
Original	**Duplicate**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**
97MOB0007	97MOB0093	<.2	<.2	1.22	1.30	2	<2	-	-	120	130	0.5	0.5	<2	<2	0.39	0.40	<.5	<.5	6	5	84	114	20	20	1.57	1.62
57MOB0019	97MOB0094	<.2	<.2	0.38	0.43	2	<2	-	-	40	50	<.5	<.5	<2	<2	0.33	0.31	<.5	<.5	3	3	165	165	4	4	1.14	1.17
97MOB0044	97MOB0096	<.2	<.2	1.03	1.04	2	<2	-	-	110	110	0.5	0.5	<2	<2	0.39	0.37	<.5	<.5	4	6	95	109	15	15	1.48	1.48
97MOB0066	97MOB0097	<.2	<.2	0.47	0.49	<2	<2	-	-	50	50	<.5	<.5	<2	<2	0.29	0.45	<.5	<.5	3	3	310	178	3	3	1.26	1.17
97MOB0085	97MOB0099	<.2	<.2	0.60	0.61	<2	<2	-	-	60	60	<.5	<.5	<2	<2	0.34	0.35	<.5	<.5	4	4	208	194	5	5	1.27	1.27
99MOB2017	99IG0195	0.4	0.4	0.38	0.35	44	56	<10	<10	70	70	<.5	<.5	<2	<2	0.12	0.10	<.5	<.5	3	3	13	12	14	13	4.38	4.47
99MOB2030	99IG0196	<.2	<.2	0.58	0.54	<2	<2	10	<10	40	40	<.5	<.5	<2	<2	0.35	0.31	<.5	<.5	6	5	19	18	11	10	1.36	1.33
99MOB2040	99IG0197	<.2	<.2	0.63	0.74	6	<2	10	<10	60	80	<.5	<.5	<2	<2	0.38	0.36	<.5	<.5	5	4	20	19	12	11	1.30	1.24
99MOB2073	99IG0198	<.2	<.2	0.59	0.66	2	<2	<10	<10	60	80	<.5	<.5	<2	<2	0.16	0.16	<.5	<.5	3	3	17	17	11	11	2.85	2.88

Sample Number		Ga (ppm)		Hg (ppb)*		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (%)		Ni (ppm)		P (ppm)		Pb (ppm)		S (%)		Sb (ppm)	
Original	**Duplicate**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**
97MOB0007	97MOB0093	<10	<10	<10	<10	0.36	0.38	30	30	0.46	0.50	170	170	<1	<1	0.03	0.04	15	16	610	610	14	10	-	-	<2	<2
97MOB0019	97MOB0094	<10	<10	<10	<10	0.09	0.12	20	20	0.16	0.19	95	95	<1	<1	0.03	0.04	6	7	550	530	6	6	-	-	<2	<2
97MOB0044	97MOB0096	<10	<10	<10	<10	0.30	0.31	30	30	0.40	0.42	165	160	<1	<1	0.03	0.04	13	13	580	590	8	12	-	-	<2	<2
97MOB0066	97MOB0097	<10	<10	<10	<10	0.12	0.12	10	20	0.20	0.21	100	100	<1	<1	0.04	0.04	8	8	470	490	8	4	-	-	<2	<2
97MOB0085	97MOB0099	<10	<10	<10	<10	0.17	0.17	20	20	0.24	0.25	120	120	<1	<1	0.05	0.05	9	8	550	550	8	6	-	-	<2	<2
99MOB2017	99IG0195	<10	<10	10	<10	0.13	0.13	<10	<10	0.19	0.19	70	70	6	6	0.03	0.02	7	5	460	460	18	16	0.30	0.30	<2	<2
99MOB2030	99IG0196	<10	<10	<10	<10	0.11	0.10	20	10	0.29	0.30	145	135	<1	<1	0.04	0.03	9	10	560	560	4	10	<.01	<.01	<2	<2
99MOB2040	99IG0197	<10	<10	<10	<10	0.15	0.21	30	20	0.31	0.31	150	140	<1	<1	0.04	0.08	11	10	570	560	6	8	<.01	<.01	<2	<2
99MOB2073	99IG0198	<10	<10	<10	<10	0.13	0.17	10	10	0.27	0.27	125	120	<1	<1	0.02	0.04	7	7	580	580	8	8	0.05	0.05	<2	<2

Sample Number		Sc (ppm)		Sr (ppm)		Ti (%)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Original	**Duplicate**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**	**O**	**D**
97MOB0007	97MOB0093	3	3	54	60	0.07	0.07	<10	<10	<10	<10	22	22	<10	<10	34	34
97MOB0019	97MOB0094	1	1	39	44	0.06	0.06	<10	<10	<10	<10	17	16	<10	<10	12	12
97MOB0044	97MOB0096	3	3	52	55	0.07	0.07	<10	<10	<10	<10	21	21	<10	<10	28	26
97MOB0066	97MOB0097	1	1	44	45	0.06	0.06	<10	<10	<10	<10	16	17	<10	<10	12	12
97MOB0085	97MOB0099	1	1	48	51	0.06	0.06	<10	<10	<10	<10	17	18	<10	<10	14	14
99MOB2017	99IG0195	1	1	22	21	0.06	0.06	<10	<10	<10	<10	17	17	<10	<10	40	38
99MOB2030	99IG0196	1	1	38	36	0.07	0.06	<10	<10	<10	<10	22	22	<10	<10	22	20
99MOB2040	99IG0197	2	2	40	44	0.07	0.07	<10	<10	<10	<10	21	20	<10	<10	20	20
99MOB2073	99IG0198	1	1	25	30	0.07	0.07	<10	<10	<10	<10	17	18	<10	<10	200	198

* Hg (ppb) by CV-AAS, Aqua Regia Leach

Appendix XXIIa: Analytical Quality Control
Duplicates - Data

LABORATORY DUPLICATES

2) Appendix IX
Till geochemistry (<0.063 mm); by ICP-AES, Aqua Regia Leach

Sample Number		Ag (ppm)		Al (%)		As (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0079	<.2	<.2	1.99	1.70	2	<2	-	-	200	160	0.5	0.5	<2	<2	0.57	0.49	<.5	<.5	7	6	42	37	36	35	2.11	2.04
97MOB0019	98PL0080	<.2	<.2	0.29	0.22	2	<2	-	-	20	10	<.5	<.5	<2	<2	0.37	0.28	<.5	<.5	2	1	13	10	4	4	0.96	0.81
97MOB0044	98PL0082	<.2	<.2	1.37	1.33	2	<2	-	-	140	120	0.5	0.5	<2	<2	0.47	0.45	<.5	<.5	5	5	31	30	24	23	1.81	1.77
97MOB0066	98PL0083	<.2	<.2	0.35	0.39	<2	<2	-	-	30	30	<.5	<.5	<2	<2	0.31	0.33	<.5	<.5	3	2	13	14	3	3	0.98	1.03
97MOB0085	98PL0085	<.2	<.2	0.51	0.57	<2	<2	-	-	40	40	<.5	<.5	<2	<2	0.36	0.40	<.5	<.5	3	3	16	18	5	5	1.14	1.22
99MOB2001	99IG0191	<.2	<.2	0.29	0.33	<2	8	<10	10	20	30	<.5	<.5	<2	<2	0.27	0.31	<.5	<.5	3	3	14	16	8	8	0.86	1.01
99MOB2053	99IG0193	<.2	<.2	0.42	0.39	4	6	10	10	10	30	<.5	<.5	<2	<2	0.31	0.28	<.5	<.5	4	3	19	18	6	6	1.11	1.04

Sample Number		Ga (ppm)		Hg (ppb)*		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (%)		Ni (ppm)		P (ppm)		Pb (ppm)		S (%)		Sb (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0079	<10	<10	<10	<10	0.56	0.46	40	40	0.79	0.71	225	205	<1	<1	0.04	0.04	27	26	890	880	12	16	-	-	<2	<2
97MOB0019	98PL0080	<10	<10	10	<10	0.04	0.03	20	20	0.11	0.09	75	55	<1	<1	<.01	<.01	4	4	840	840	2	4	-	-	<2	<2
97MOB0044	98PL0082	<10	<10	<10	<10	0.37	0.36	30	40	0.58	0.56	180	175	<1	<1	0.03	0.03	19	17	860	850	10	8	-	-	<2	<2
97MOB0066	98PL0083	<10	<10	<10	<10	0.04	0.04	20	20	0.15	0.16	75	80	<1	<1	0.01	<.01	5	5	780	800	4	4	-	-	<2	<2
97MOB0085	98PL0085	<10	<10	<10	<10	0.10	0.11	20	30	0.23	0.24	100	110	<1	<1	0.01	0.01	6	7	880	890	6	6	-	-	<2	<2
99MOB2001	99IG0191	<10	<10	<10	<10	0.04	0.04	20	20	0.16	0.17	80	90	<1	<1	<.01	0.01	6	6	790	770	4	2	<.01	<.01	<2	<2
99MOB2053	99IG0193	<10	<10	<10	10	0.06	0.06	30	20	0.22	0.21	95	90	<1	<1	0.01	0.01	7	7	740	730	2	2	<.01	<.01	<2	<2

Sample Number		Sc (ppm)		Sr (ppm)		Ti (%)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0079	4	4	75	65	0.10	0.07	<10	<10	<10	<10	32	26	<10	<10	54	48
97MOB0019	98PL0080	1	<1	38	28	0.05	0.03	<10	<10	<10	<10	17	12	<10	<10	8	6
97MOB0044	98PL0082	3	3	60	61	0.08	0.08	<10	<10	<10	<10	26	24	<10	<10	38	36
97MOB0066	98PL0083	1	1	34	40	0.05	0.06	<10	<10	<10	<10	15	16	<10	<10	10	10
97MOB0085	98PL0085	1	1	43	51	0.06	0.07	<10	<10	<10	<10	18	19	<10	<10	14	14
99MOB2001	99IG0191	<1	1	22	27	0.03	0.05	<10	<10	<10	<10	13	15	<10	<10	10	10
99MOB2053	99IG0193	1	1	25	22	0.05	0.05	<10	<10	<10	<10	18	17	<10	<10	12	12

* Hg (ppb) by CV-AAS, Aqua Regia Leach

LABORATORY DUPLICATES

3) Appendix X
Till geochemistry (<0.002 mm); by ICP-AES, Aqua Regia Leach

Sample Number		Ag (ppm)		Al (%)		As (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	<.2	<.2	3.72	3.60	<2	<2	-	-	330	320	1.5	2.0	<2	<2	0.84	0.83	<.5	<.5	13	13	73	67	71	65	3.94	3.74
97MOB0026	98PL0087	<.2	<.2	2.61	2.84	<2	<2	-	-	270	260	1.5	1.5	<2	<2	0.65	0.68	<.5	<.5	12	12	61	58	39	39	3.46	3.57
97MOB0044	98PL0089	<.2	<.2	2.74	2.91	4	4	-	-	300	270	1.0	1.5	<2	<2	0.75	0.76	<.5	<.5	12	12	64	60	48	47	3.31	3.44
97MOB0076	98PL0090	<.2	<.2	3.79	3.15	<2	<2	-	-	340	290	1.5	1.5	<2	<2	0.79	0.72	0.5	<.5	17	15	79	70	98	87	4.28	3.79
97MOB0085	98PL0092	<.2	<.2	2.88	2.32	<2	<2	-	-	290	200	1.5	1.0	<2	<2	0.71	0.66	<.5	<.5	12	13	65	51	42	26	3.46	3.19
99MOB2025	99IG0189	<.2	<.2	2.51	2.52	6	8	10	10	180	190	0.5	0.5	<2	<2	0.63	0.60	<.5	<.5	13	14	71	69	62	64	3.78	3.62
99MOB2075	99IG0190	<.2	<.2	2.74	2.46	8	6	10	10	160	140	0.5	0.5	<2	<2	0.52	0.46	<.5	<.5	15	15	84	69	74	71	3.89	3.68

Sample Number		Ga (ppm)		Hg (ppb)*		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (%)		Ni (ppm)		Pb (ppm)		S (%)		Sb (ppm)		Sc (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	10	10	10	<10	1.03	1.07	80	90	1.66	1.56	435	420	<1	<1	0.08	0.07	48	44	28	24	-	-	<2	<2	8	8
97MOB0026	98PL0087	<10	10	<10	<10	0.63	0.76	60	60	1.28	1.27	405	410	<1	<1	0.04	0.05	39	34	22	20	-	-	<2	<2	6	7
97MOB0044	98PL0089	10	10	<10	<10	0.72	0.87	60	70	1.42	1.38	420	400	<1	<1	0.06	0.06	44	37	22	22	-	-	<2	<2	7	7
97MOB0076	98PL0090	10	10	<10	<10	1.09	0.89	70	70	1.76	1.55	495	435	<1	<1	0.07	0.06	55	48	20	18	-	-	<2	<2	9	8
97MOB0085	98PL0092	<10	<10	<10	<10	0.79	0.53	70	70	1.36	1.02	415	365	<1	<1	0.05	0.04	38	27	18	20	-	-	<2	<2	7	6
99MOB2025	99IG0189	<10	<10	<10	<10	0.72	0.68	60	60	1.29	1.31	435	435	<1	<1	0.38	0.35	37	37	16	16	<.01	<.01	<2	<2	7	7
99MOB2075	99IG0190	10	<10	10	<10	0.68	0.62	60	60	1.53	1.43	460	435	<1	<1	0.47	0.44	46	43	16	18	0.01	<.01	<2	<2	7	6

Sample Number		Sr (ppm)		Ti (%)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	138	131	0.14	0.14	<10	<10	<10	<10	52	52	<10	<10	110	108
97MOB0026	98PL0087	97	116	0.15	0.16	<10	<10	<10	<10	49	49	<10	<10	84	84
97MOB0044	98PL0089	100	125	0.15	0.15	<10	<10	<10	<10	52	49	<10	<10	94	90
97MOB0076	98PL0090	118	104	0.17	0.16	<10	<10	<10	<10	61	54	<10	<10	126	108
97MOB0085	98PL0092	108	101	0.16	0.15	<10	<10	<10	<10	52	49	<10	<10	90	62
99MOB2025	99IG0189	81	81	0.14	0.14	<10	<10	<10	<10	47	47	<10	<10	84	84
99MOB2075	99IG0190	80	63	0.15	0.13	<10	<10	<10	<10	54	50	<10	<10	104	98

* Hg (ppb) by CV-AAS, Aqua Regia Leach

Appendix XXIIa: Analytical Quality Control
Duplicates - Data

LABORATORY DUPLICATES

4) Appendix XI
Humus geochemistry (<2 mm); by ICP-AES, Aqua Regia Leach

Sample Number		Ag (ppm)		Al (%)		As (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0003	98PL0100	<.2	<.2	0.32	0.31	<2	<2	-	-	50	50	<.5	<.5	<2	<2	0.24	0.24	<.5	<.5	2	3	9	8	12	9	0.76	0.7
97MOB0030	98PL0101	<.2	<.2	1.08	1.06	<2	<2	-	-	150	160	0.5	0.5	<2	<2	0.32	0.32	<.5	<.5	8	8	23	23	21	19	1.49	1.51
99MOB2017	99IG0195	0.4	0.4	0.38	0.35	44	56	<10	<10	70	70	<.5	<.5	<2	<2	0.12	0.10	<.5	<.5	3	3	13	12	14	13	4.38	4.47
99MOB2030	99IG0196	<.2	<.2	0.58	0.54	<2	<2	10	<10	40	40	<.5	<.5	<2	<2	0.35	0.31	<.5	<.5	6	5	19	18	11	10	1.36	1.33
99MOB2040	99IG0197	<.2	<.2	0.63	0.74	6	<2	10	<10	60	80	<.5	<.5	<2	<2	0.38	0.36	<.5	<.5	5	4	20	19	12	11	1.30	1.24
99MOB2073	99IG0198	<.2	<.2	0.59	0.66	2	<2	<10	<10	60	80	<.5	<.5	<2	<2	0.16	0.16	<.5	<.5	3	3	17	17	11	11	2.85	2.88

Sample Number		Ga (ppm)		Hg (ppb)*		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (%)		Ni (ppm)		P (ppm)		Pb (ppm)		S (%)		Sb (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0003	98PL0100	<10	<10	60	60	0.07	0.07	20	20	0.14	0.14	60	65	1	1	0.01	0.01	5	5	340	340	6	2	-	-	2	<2
97MOB0030	98PL0101	<10	<10	70	70	0.22	0.22	40	40	0.44	0.44	310	310	2	<1	0.01	0.01	16	16	410	420	6	8	-	-	2	<2
99MOB2017	99IG0195	<10	<10	10	<10	0.13	0.13	<10	<10	0.19	0.19	70	70	6	6	0.03	0.02	7	5	460	460	18	16	0.30	0.30	<2	<2
99MOB2030	99IG0196	<10	<10	<10	<10	0.11	0.10	20	10	0.29	0.30	145	135	<1	<1	0.04	0.03	9	10	560	580	4	10	<.01	<.01	<2	<2
99MOB2040	99IG0197	<10	<10	<10	<10	0.15	0.21	30	20	0.31	0.31	150	140	<1	<1	0.04	0.08	11	10	570	580	6	8	<.01	<.01	<2	<2
99MOB2073	99IG0198	<10	<10	<10	<10	0.13	0.17	10	10	0.27	0.27	125	120	<1	<1	0.02	0.04	7	7	580	580	8	8	0.05	0.05	<2	<2

Sample Number		Sc (ppm)		Sr (ppm)		Ti (%)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0003	98PL0100	<1	<1	32	30	0.03	0.03	<10	<10	<10	<10	10	9	<10	<10	10	12
97MOB0030	98PL0101	2	2	43	42	0.05	0.05	<10	<10	<10	<10	18	19	<10	<10	36	34
99MOB2017	99IG0195	1	1	22	21	0.06	0.06	<10	<10	<10	<10	17	17	<10	<10	40	38
99MOB2030	99IG0196	1	1	38	36	0.07	0.06	<10	<10	<10	<10	22	22	<10	<10	22	20
99MOB2040	99IG0197	2	2	40	44	0.07	0.07	<10	<10	<10	<10	21	20	<10	<10	20	20
99MOB2073	99IG0198	1	1	25	30	0.07	0.07	<10	<10	<10	<10	17	18	<10	<10	200	198

* Hg (ppb) by CV-AAS, Aqua Regia Leach

5) Appendix XII
Peat geochemistry; by ICP-AES, nitric-perchloric acid digestion

Sample Number		Ag (ppm)		Al (ppm)		As (ppm)**		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (ppm)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99MCB2069	00IG0018	0.2	0.1	4600	5200	8	12	70	80	0.2	0.2	1.00	<1.00	1050	1250	<0.20	<0.20	1.00	1.50	14.5	14.5	3.5	4.0	8600	8900

Sample Number		Ga (ppm)		Hg (ppb)*		K (ppm)		La (ppm)**		Mg (ppm)		Mn (ppm)		Mo (ppm)		Na (ppm)		Ni (ppm)		P (ppm)		Pb (ppm)		Sb (ppm)**	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99MOB2069	00IG0018	<5	<5	30	30	600	700	20	20	750	750	15	16	1.50	1.00	150	150	5.0	4.5	905	970	<0.50	<0.50	2	2

Sample Number		Sc (ppm)		Sr (ppm)		Ti (ppm)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)**		Zn (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99MOB2069	00IG0018	<2	<2	19.0	22.0	150	200	<5	<5	<5	<5	9.5	9.5	<2	<2	4.5	4.5

* Hg (ppb) by CV-AAS, Aqua Regia Leach
** As, La, Sb and W analysed by INAA

LABORATORY DUPLICATES

6) Appendix XIII
Milestone AMA-254 Hg determinations

XIIIa - Dwarf Birch Leaves

Sample Number		Hg (ppb)	
Original	Duplicate	O	D
97MOB0004	97MOB0004b	43	39
97MOB0082	97MOB0082b	105	107

XIIIc - Humus (<2 mm)

Sample Number		Hg (ppb)	
Original	Duplicate	O	D
97MOB0020	97MOB0020b	126	105
99MOB2024	72-99-145	230	223

XIIId - Till (<0.002 mm)

Sample Number		Hg (ppb)	
Original	Duplicate	O	D
97MOB0007	97MOB0007b	5	3
97MOB0038	97MOB0038b	16	15
97MOB0042	97MOB0042b	4	4
97MOB0076	97MOB0076b	5	4
97MOB0084	97MOB0084b	4	4
97MOB0090	97MOB0090b	5	5
99MOB2023	72-99-141	13	13

XIIIe - Till (<0.063 mm)

Sample Number		Hg (ppb)	
Original	Duplicate	O	D
99MOB2008	72-99-142	<10	<10
99MOB2033	72-99-143	<10	<10

XIIIf - Till (<2 mm)

Sample Number		Hg (ppb)	
Original	Duplicate	O	D
99MOB2017	99IG0195	14	19
99MOB2030	99IG0196	10	<10
99MOB2040	99IG0197	<10	<10
99MOB2073	99IG0198	12	<10
99MOB2005	72-99-144	11	<10
99MOB2044	72-99-146	18	19

XIIIg - Bedrock

Sample Number		Hg (ppb)	
Original	Duplicate	O	D
ROCK97-13	ROCK97-13b	1	1
ROCK97-15	ROCK97-15b	3	3
ROCK97-17	ROCK97-17b	1	1

LABORATORY DUPLICATES

7) Appendix XIV
LOI, Organic Carbon and pH

XIVa - Peat

Sample Number		LOI (%)		Organic C (%)		pH	
Original	Duplicate	O	D	O	D	O	D
99MOB2057	99MOB2057b	-	-	44.0	44.0	-	3.6
99MOB2058	99MOB2058b	86.0	83.1	-	-	3.6	-

XIVb - Humus (<2 mm)

Sample Number		LOI (%)		Organic C (%)	
Original	Duplicate	O	D	O	D
97MOB0003	98PL0100	14.2	14.6	-	-
97MOB0030	98PL0101	19.6	19.2	-	-
99MOB2013	99MOB2013b	-	-	41.0	40.7

XIVc - Till (<0.002 mm)

Sample Number		LOI (%)		Organic C (%)	
Original	Duplicate	O	D	O	D
97MOB0007	98PL0086	3.4	3.0	-	-
97MOB0026	98PL0087	2.6	2.6	-	-
97MOB0044	98PL0089	2.8	2.4	-	-
97MOB0076	98PL0090	3.4	3.0	-	-
97MOB0085	98PL0092	7.4	5.8	-	-
99MOB2017	99MOB2017b	-	-	3.4	3.4
99MOB2025	99IG0189	3.2	2.8	0.2	0.2
99MOB2044	99MOB2044b	-	-	0.5	0.5
99MOB2075	99IG0190	3.4	3.6	0.3	0.3

XIVd - Till (<0.063 mm)

Sample Number		LOI (%)		Organic C (%)	
Original	Duplicate	O	D	O	D
97MOB0007	98PL0079	2.4	1.4	-	-
97MOB0009	97MOB0009b	-	-	ND*	ND*
97MOB0019	98PL0080	0.2	0.6	-	-
97MOB0044	98PL0082	1.2	1.0	-	-
97MOB0066	98PL0083	1.6	1.6	-	-
97MOB0075	97MOB0075b	-	-	ND*	ND*
97MOB0085	98PL0085	1.6	1.0	-	-
99MOB2014	99MOB2014b	-	-	0.0	0.0
99MOB2048	99MOB2048b	-	-	0.0	0.0

XIVe - Till (<2 mm)

Sample Number		LOI (%)		Organic C (%)		pH	
Original	Duplicate	O	D	O	D	O	D
97MOB0007	97MOB0093	0.4	0.6	-	-	-	-
97MOB0019	97MOB0094	0.8	0.2	-	-	-	-
97MOB0044	97MOB0096	0.8	0.4	-	-	-	-
97MOB0066	97MOB0097	1.2	1.0	-	-	-	-
97MOB0085	97MOB0099	0.8	0.8	-	-	-	-
99MOB2027	99MOB2027b	-	-	0.2	0.1	-	-
99MOB2030	99MOB2030b	-	-	-	-	4.6	4.7
99MOB2048	99MOB2048b	-	-	ND*	ND*	-	-
99MOB2049	99MOB2049b	-	-	-	-	4.8	4.8
99MOB2054	99MOB2054b	-	-	-	-	5.0	5.1

* Organic C not determined because Total C < 0.1%

LABORATORY DUPLICATES

8) Appendix XVII
Hg Fractionation - HYD-ICP-MS, Sodium Pyrophosphate Leach

XVIIa - Humus (<2 mm)

Sample Number		Hg (ppb)		TOC (ppm)	
Original	Duplicate	O	D	O	D
97MOB0039	97MOB0039b	31	28	26700	26900
99MOB2002	99MOB2002b	30	29	24400	24100
99MOB2043	99MOB2043b	25	28	30800	31600

XVIIb - Till (<2 µm)

Sample Number		Hg (ppb)		TOC (ppm)	
Original	Duplicate	O	D	O	D
99MOB2010	99MOB2010b	18	15	23600	25300
99MOB2027	99MOB2027b	73	-	24500	24900
99MOB2073	99MOB2073b	31	33	5400	4900

Appendix XXIIa: Analytical Quality Control
Duplicates - Data

LABORATORY DUPLICATES

9) Appendix XVIIII
Chemical Fractionation Studies

XVIIIb - Till (<0.002 mm); by ICP-MS, Sodium Pyrophosphate Leach (1 of 3)

Sample Number		Ag (ppm)		Al (ppm)		As (ppm)		Au (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Br (ppm)		Ca (ppm)		Cd (ppm)		Ce (ppm)		Cl (ppm)		Co (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.058	0.046	6420	3230	0.4	0.3	<.05	<.05	6	<2	160.5	144.0	0.35	0.15	0.020	<.005	<2	<2	2450	2050	0.03	0.04	12.50	8.74	<5	<5	0.95	0.40
97MOB0076	98PL0090	0.048	0.050	2750	1670	0.3	0.3	<.05	<.05	<2	<2	143.5	127.5	0.30	0.20	0.015	<.005	<2	<2	1890	1770	0.03	0.04	7.66	6.55	<5	<5	0.50	0.30

Sample Number		Cr (ppm)		Cs (ppm)		Cu (ppm)		Dy (ppm)		Er (ppm)		Eu (ppm)		Fe (ppm)		Ga (ppm)		Gd (ppm)		Ge (ppm)		Hf (ppm)		Hg (ppm)		Ho (ppm)		I (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	5.95	2.45	0.745	0.405	13.20	9.50	0.740	0.670	0.425	0.400	0.275	0.215	2700	1115	4.90	3.20	1.200	1.000	<.1	<.1	0.39	0.25	<.1	<.1	0.130	0.115	0.3	0.3
97MOB0076	98PL0090	2.85	1.65	0.350	0.200	13.50	11.25	0.820	0.785	0.475	0.445	0.280	0.280	1260	820	3.15	2.75	1.360	1.175	<.1	<.1	0.26	0.18	<.1	<.1	0.150	0.125	0.5	0.4

Sample Number		In (ppm)		K (ppm)		La (ppm)		Li (ppm)		Lu (ppm)		Mg (ppm)		Mn (ppm)		Mo (ppm)		Na (ppm)		Nb (ppm)		Nd (ppm)		Ni (ppm)		P (ppm)		Pb (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	<.005	<.005	2480	1190	10.30	7.76	4.15	0.75	0.065	0.045	1585	925	33.3	13.9	0.14	0.15	-	-	0.67	0.26	7.84	6.32	5.15	2.30	-	-	3.8	2.2
97MOB0076	98PL0090	<.005	<.005	1000	715	9.83	8.66	1.30	<.05	0.070	0.070	895	695	14.8	9.4	0.28	0.17	-	-	0.31	0.19	7.85	6.95	2.75	1.80	-	-	2.9	2.2

Sample Number		Pr (ppm)		Rb (ppm)		Re (ppm)		Sb (ppm)		Se (ppm)		Sm (ppm)		Sn (ppm)		Sr (ppm)		Ta (ppm)		Tb (ppm)		Te (ppm)		Th (ppm)		Ti (ppm)		Tl (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	2.07	1.63	15.20	7.50	<.001	<.001	0.025	<.005	1.0	<.5	1.280	1.055	0.15	0.05	28.00	19.05	0.05	0.01	0.155	0.130	<.05	<.05	4.12	3.08	153	54	0.145	0.080
97MOB0076	98PL0090	2.08	1.82	6.19	3.82	<.001	<.001	<.005	<.005	<.5	<.5	1.390	1.180	0.05	0.05	15.95	13.80	0.02	0.01	0.160	0.145	<.05	<.05	3.01	2.74	63	41	0.085	0.050

Sample Number		Tm (ppm)		U (ppm)		V (ppm)		W (ppm)		Y (ppm)		Yb (ppm)		Zn (ppm)		Zr (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.060	0.045	0.500	0.405	4.90	2.45	0.42	0.31	4.20	3.30	0.390	0.340	9.6	3.8	9.6	3.8
97MOB0076	98PL0090	0.070	0.060	0.515	0.465	2.60	1.70	0.34	0.33	4.65	4.23	0.475	0.435	6.2	3.0	6.2	3.0

XVIIIb - Till (<0.002 mm); by ICP-MS, Hot Hydroxylamine Leach (2 of 3)

Sample Number		Ag (ppm)		Al (ppm)		As (ppm)		Au (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Br (ppm)		Ca (ppm)		Cd (ppm)		Ce (ppm)		Cl (ppm)		Co (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.040	0.044	9610	7840	1.0	0.9	<.05	<.05	12	<2	94.5	76.1	1.15	0.85	0.225	0.100	<2	<2	2680	1980	0.06	0.04	44.10	28.1	-	-	3.85	2.85
97MOB0076	98PL0090	0.052	0.048	8460	9290	0.8	1.0	<.05	<.05	2	<2	79.5	81.1	0.70	0.75	0.125	0.135	<2	<2	1510	1670	0.04	0.04	22.4	26.7	-	-	4.40	4.90

Sample Number		Cr (ppm)		Cs (ppm)		Cu (ppm)		Dy (ppm)		Er (ppm)		Eu (ppm)		Fe (ppm)		Ga (ppm)		Gd (ppm)		Ge (ppm)		Hf (ppm)		Hg (ppm)		Ho (ppm)		I (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	16.35	10.40	0.815	0.450	39.9	31.0	2.190	1.570	0.965	0.760	0.645	0.480	11000	7950	2.65	1.50	3.370	2.510	<.1	<.1	0.02	0.01	<.01	<.01	0.330	0.25	0.6	0.3
97MOB0076	98PL0090	13.35	14.90	0.435	0.605	44.6	45.3	1.270	1.385	0.610	0.660	0.405	0.440	9900	11120	1.65	1.90	2.080	2.200	<.1	<.1	<.01	0.01	<.01	<.01	0.205	0.215	0.2	0.3

Sample Number		In (ppm)		K (ppm)		La (ppm)		Li (ppm)		Lu (ppm)		Mg (ppm)		Mn (ppm)		Mo (ppm)		Na (ppm)		Nb (ppm)		Nd (ppm)		Ni (ppm)		P (ppm)		Pb (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.005	0.005	2260	1660	29.20	19.55	20.00	11.80	0.115	0.085	4720	2560	139.5	81.3	0.01	<.01	-	-	0.07	0.05	24.00	16.80	25.00	14.00	-	-	18.0	11.1
97MOB0076	98PL0090	0.005	0.005	1550	1785	17.30	19.50	11.20	13.35	0.075	0.070	2830	3190	129.0	141.0	0.01	0.01	-	-	0.05	0.05	14.20	16.10	16.75	18.10	-	-	12.2	11.9

Sample Number		Pr (ppm)		Rb (ppm)		Re (ppm)		Sb (ppm)		Se (ppm)		Sm (ppm)		Sn (ppm)		Sr (ppm)		Ta (ppm)		Tb (ppm)		Te (ppm)		Th (ppm)		Ti (ppm)		Tl (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	6.62	4.39	15.40	8.82	<.001	<.001	<.005	<.005	<.5	<.5	3.820	2.720	<.05	<.05	22.10	15.05	<.01	<.01	0.440	0.330	<.05	<.05	0.87	0.54	36	25	0.19	0.105
97MOB0076	98PL0090	3.87	4.35	8.82	11.15	<.001	<.001	<.005	<.005	<.5	<.5	2.330	2.500	<.05	<.05	11.50	11.85	<.01	<.01	0.260	0.290	<.05	<.05	0.47	0.44	25	27	0.11	0.140

Sample Number		Tm (ppm)		U (ppm)		V (ppm)		W (ppm)		Y (ppm)		Yb (ppm)		Zn (ppm)		Zr (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.125	0.090	0.745	0.430	12.00	7.45	0.01	<.01	9.84	7.39	0.775	0.555	61.0	31.4	0.50	0.25
97MOB0076	98PL0090	0.075	0.075	0.385	0.415	9.50	9.50	<.01	<.01	6.00	6.14	0.435	0.465	37.2	38.8	0.30	0.35

Appendix XXIIa: Analytical Quality Control
Duplicates - Data

XVIIIb - Till (<0.002 mm); by ICP-MS/ICP-AES, Aqua Regia Leach (3 of 3)

Sample Number		Ag (ppm)		Al (%)		As (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)		Ga (ppm)		Ge (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.06	0.06	3.04	3.47	3.2	3.4	140	170	1.0	1.5	0.46	0.54	0.45	0.49	<.1	<.1	10	10	63	71	22.0	27.0	3.07	3.42	13.1	14.0	0.3	0.3
97MOB0076	98PL0090	0.08	0.06	3.40	3.07	3.2	3.0	170	150	1.0	1.0	0.48	0.44	0.49	0.51	<.1	<.1	13	12	82	75	38.4	33.8	3.75	3.49	13.9	12.4	0.3	0.3

Sample Number		Hg (ppm)		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (ppm)		Ni (ppm)		P (ppm)		Pb (ppm)		Sb (ppm)		Sc (ppm)		Sr (ppm)		Te (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	<.01	<.01	0.81	0.92	50	70	1.30	1.50	335	380	0.4	0.4	-	-	26	30	-	-	12	14	0.1	0.1	7	8	107	108	<.1	<.1
97MOB0076	98PL0090	<.01	<.01	0.89	0.79	50	50	1.64	1.51	410	390	0.6	0.6	-	-	36	33	-	-	12	10	0.1	0.1	9	8	100	98	<.1	<.1

Sample Number		Ti (ppm)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.17	0.18	0.8	0.9	1.90	2.15	43	48	0.65	0.65	68	78
97MOB0076	98PL0090	0.20	0.20	1.1	1.0	1.70	1.60	54	50	0.75	0.70	88	80

XVIIIc - Till (<0.063 mm); by ICP-MS, Hot Hydroxylamine Leach (1 of 2)

Sample Number		Ag (ppm)		Al (ppm)		As (ppm)		Au (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Br (ppm)		Ca (ppm)		Cd (ppm)		Ce (ppm)		Cl (ppm)		Co (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0079	0.028	0.028	4000	4100	1.1	1.1	<.05	0.05	<2	<2	112.50	108.00	0.50	0.50	0.160	0.200	4	2	2960	3380	0.04	0.04	36.40	38.00	-	-	3.10	2.70
97MOB0066	98PL0083	0.026	0.016	1675	980	0.2	0.7	<.05	<.05	4	<2	32.40	15.35	0.30	<.05	0.265	0.100	2	2	2750	1370	0.02	0.01	33.20	17.25	-	-	0.90	1.20

Sample Number		Cr (ppm)		Cs (ppm)		Cu (ppm)		Dy (ppm)		Er (ppm)		Eu (ppm)		Fe (ppm)		Ga (ppm)		Gd (ppm)		Ge (ppm)		Hf (ppm)		Hg (ppm)		Ho (ppm)		I (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0079	10.15	10.05	0.500	0.410	30.90	28.40	1.510	1.535	1.505	0.750	0.460	0.455	4850	4330	1.80	1.60	2.500	2.470	<.1	<.1	0.02	0.03	<.1	<.1	0.240	0.255	0.2	0.3
97MOB0066	98PL0083	2.20	3.05	0.310	0.145	2.20	2.55	1.495	0.580	0.675	0.240	0.455	0.165	1460	1460	0.60	0.50	2.170	0.960	<.1	<.1	0.01	<.01	<.1	<.1	0.260	0.085	1.0	0.4

Sample Number		In (ppm)		K (ppm)		La (ppm)		Li (ppm)		Lu (ppm)		Mg (ppm)		Mn (ppm)		Mo (ppm)		Na (ppm)		Nb (ppm)		Nd (ppm)		Ni (ppm)		P (ppm)		Pb (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0079	0.005	0.005	1435	1445	23.40	23.90	7.05	6.80	0.075	0.080	2140	1995	87.7	84.3	0.01	0.01	160	160	0.05	0.05	16.90	16.95	12.55	12.40	830	860	10.1	10.4
97MOB0066	98PL0083	<.005	<.005	90	70	15.20	8.13	2.90	0.65	0.075	0.020	539	269	27.9	28.6	0.04	0.04	30	30	0.11	0.14	15.35	6.16	1.70	2.50	1075	600	10.9	3.5

Sample Number		Pr (ppm)		Rb (ppm)		Re (ppm)		Sb (ppm)		Se (ppm)		Sm (ppm)		Sn (ppm)		Sr (ppm)		Ta (ppm)		Tb (ppm)		Te (ppm)		Th (ppm)		Ti (ppm)		Tl (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0079	4.90	4.93	10.10	7.88	<.001	<.001	<.005	<.005	<.5	<.5	2.750	2.780	0.10	0.15	27.50	26.30	<.01	<.01	0.320	0.320	<.05	<.05	1.31	1.46	38	39	0.110	0.100
97MOB0066	98PL0083	4.10	1.75	2.10	1.36	<.001	<.001	0.005	0.005	<.5	<.5	2.760	1.040	0.15	0.05	14.85	10.95	0.01	<.01	0.310	0.120	<.05	<.05	0.05	0.01	65	47	0.020	0.015

Sample Number		Tm (ppm)		U (ppm)		V (ppm)		W (ppm)		Y (ppm)		Yb (ppm)		Zn (ppm)		Zr (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0079	0.085	0.085	0.735	0.760	8.45	7.75	0.01	<.01	7.63	6.94	0.555	0.580	25.0	24.4	1.20	1.30
97MOB0066	98PL0083	0.080	0.025	0.835	0.215	3.25	3.75	0.06	0.02	4.06	2.60	0.485	0.160	4.2	4.4	0.20	0.20

XVIIIc - Till (<0.063 mm); by ICP-MS/ICP-AES, Aqua Regia Leach (2 of 2)

Sample Number		Ag (ppm)		Al (%)		As (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)		Ga (ppm)		Ge (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.02	0.02	1.61	1.63	1.6	1.6	80	80	0.5	0.5	0.14	0.14	0.27	0.27	<.1	<.1	5	5	38	39	12.0	14.2	1.86	1.89	5.6	6.0	0.1	0.1
97MOB0076	98PL0090	0.06	0.04	0.26	0.27	0.8	0.8	10	10	<.5	<.5	0.06	0.06	0.18	0.19	<.1	<.1	1	2	13	13	2.6	2.8	0.95	0.92	1.3	1.3	0.1	0.1

Sample Number		Hg (ppm)		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (ppm)		Ni (ppm)		P (ppm)		Pb (ppm)		Sb (ppm)		Sc (ppm)		Sr (ppm)		Te (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.01	<.01	0.42	0.42	20	20	0.60	0.62	170	175	0.2	0.2	0.04	0.04	17	19	150	150	2	8	<.1	<.1	4	4	55	55	<.1	<.1
97MOB0076	98PL0090	<.01	<.01	0.03	0.03	10	10	0.13	0.13	65	65	0.2	0.2	0.01	0.01	4	5	120	160	2	2	<.1	<.1	1	1	25	25	<.1	<.1

Sample Number		Ti (ppm)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D
97MOB0007	98PL0086	0.11	0.11	0.4	0.4	0.95	0.90	27	28	0.40	0.50	34	36
97MOB0076	98PL0090	0.07	0.07	<.1	<.1	0.60	0.55	15	15	0.55	0.50	8	8

Appendix XXIIa: Analytical Quality Control
Duplicates - Data

XVIIIe - Peat; by ICP-MS, Sodium Pyrophosphate Leach (not in sequence)

Sample Number		Ag (ppm)		Al (ppm)		As (ppm)		Au (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Br (ppm)		Ca (ppm)		Cd (ppm)		Ce (ppm)		Co (ppm)		Cr (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99MOB2069	00IG0018	0.030	0.028	3210	3160	2.1	2.2	<.05	<.05	<2	<2	54.6	54.9	0.25	0.20	0.045	0.040	36	40	1610	1520	0.08	0.06	34.00	35.90	0.80	0.85	4.85	5.05

Sample Number		Cs (ppm)		Cu (ppm)		Dy (ppm)		Er (ppm)		Eu (ppm)		Fe (ppm)		Ga (ppm)		Gd (ppm)		Ge (ppm)		Hf (ppm)		Hg (ppm)		Ho (ppm)		I (ppm)		In (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99MOB2069	00IG0018	0.015	0.015	2.85	2.95	0.770	0.775	0.345	0.395	0.320	0.345	7280	7340	0.30	0.35	1.395	1.460	<.1	<.1	0.12	0.14	<.1	<.1	0.135	0.145	40.2	45.0	0.005	<.005

Sample Number		K (ppm)		La (ppm)		Li (ppm)		Lu (ppm)		Mg (ppm)		Mn (ppm)		Mo (ppm)		Na (ppm)		Nb (ppm)		Nd (ppm)		Ni (ppm)		P (ppm)		Pb (ppm)		Pr (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99MOB2069	00IG0018	160	165	16.25	16.85	0.65	0.20	0.045	0.045	331	315	2.1	2.1	0.52	0.51	-	-	0.50	0.53	12.45	12.70	1.95	1.95	-	-	2.4	2.6	3.65	3.74

Sample Number		Rb (ppm)		Re (ppm)		Sb (ppm)		Se (ppm)		Sm (ppm)		Sn (ppm)		Sr (ppm)		Ta (ppm)		Tb (ppm)		Te (ppm)		Th (ppm)		Ti (ppm)		Tl (ppm)		Tm (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99MOB2069	00IG0018	0.29	0.32	<.001	<.001	0.015	0.015	<.5	<.5	2.010	2.090	0.05	0.05	11.90	11.55	0.03	0.04	0.185	0.190	<.05	<.05	4.37	4.46	154	161	0.005	0.015	0.050	0.050

Sample Number		U (ppm)		V (ppm)		W (ppm)		Y (ppm)		Yb (ppm)		Zn (ppm)		Zr (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99MOB2069	00IG0018	0.900	0.885	3.75	3.80	0.05	0.06	3.89	3.88	0.320	0.315	2.4	2.6	4.10	4.30

LABORATORY DUPLICATES

10) Appendix XIX
Water Chemistry

XIXa - Cations; by direct ICP-MS and Hg by HYD-ICP-MS

Sample Number		Li (ppb)		Be (ppb)		B (ppb)		Al (ppb)		Ti (ppb)		V (ppb)		Cr (ppb)		Fe (ppb)		Mn (ppb)		Co (ppb)		Ni (ppb)		Cu (ppb)		Zn (ppb)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97-W8o	97W8o rep	0.714	0.693	<.005	<.005	-	-	11	11	<.5	<.5	0.2	0.2	0.1	0.1	24	23	3.5	3.5	<.05	<.05	0.5	0.5	0.7	0.7	<.5	<.5
99KAM-4f	99KAM-4f rep	0.798	0.748	<.005	<.005	3.2	2.2	19	16	<.5	<.5	0.1	0.1	0.3	0.3	29	27	0.7	0.7	<.05	<.05	0.5	0.5	0.7	0.6	<.5	0.5
99KAM-11f	99KAM-11f rep	0.644	0.588	<.005	<.005	2.8	1.9	8	7	<.5	<.5	0.1	<.1	0.3	0.3	32	32	1.3	1.2	<.05	<.05	0.3	0.3	0.7	0.7	<.5	<.5
99KAM-18f	99KAM-18f rep	0.538	0.543	<.005	<.005	2.7	2.2	3	3	<.5	<.5	<.1	<.1	0.3	0.2	20	18	0.3	0.3	<.05	<.05	<.2	0.2	0.6	0.5	<.5	<.5
99KAM-13	99KAM-13 rep	0.609	0.656	<.005	<.005	2.9	2.4	5	6	<.5	<.5	<.1	<.1	0.2	0.3	19	19	2.8	3.0	<.05	<.05	0.3	0.2	0.5	0.5	<.5	<.5
99KAM-19	99KAM-19 rep	0.488	0.534	<.005	<.005	2.4	2.2	8	9	<.5	<.5	0.1	0.1	0.3	0.3	26	28	4.2	4.5	<.05	<.05	0.2	<.2	0.6	0.6	<.5	<.5
99SPI-4f	99SPI-4f rep	0.560	0.573	<.005	<.005	1.7	2.1	14	14	<.5	<.5	0.1	<.1	0.3	0.3	55	63	1.9	2.0	<.05	<.05	0.5	0.4	0.8	0.9	<.5	<.5
99HAPPY-1f	99HAPPY-1f rep	0.565	0.539	<.005	0.008	1.3	1.6	8	7	<.5	<.5	<.1	<.1	0.2	0.2	29	30	1.7	1.7	<.05	<.05	0.4	0.3	1.3	1.2	0.7	0.7

Sample Number		As (ppb)		Se (ppb)		Rb (ppb)		Sr (ppb)		Y (ppb)		Mo (ppb)		Ag (ppb)		Cd (ppb)		In (ppb)		Sb(ppb)		Cs (ppb)		Ba (ppb)		La (ppb)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97-W8o	97W8o rep	0.3	0.4	<1	<1	1.34	1.34	12.5	12.6	0.04	0.04	0.06	0.05	<.05	<.05	<.05	<.05	<.01	<.01	0.02	0.01	<.01	<.01	5.1	5.0	0.10	0.10
99KAM-4f	99KAM-4f rep	0.2	0.1	<1	<1	1.59	1.56	13.3	13.8	0.04	0.03	0.06	0.06	<.05	<.05	<.05	<.05	<.01	<.01	<.01	<.01	<.01	<.01	5.3	5.4	0.09	0.09
99KAM-11f	99KAM-11f rep	0.2	0.2	<1	<1	1.23	1.19	14.3	14.7	0.02	0.03	<.05	<.05	<.05	<.05	<.05	<.05	<.01	<.01	<.01	<.01	<.01	<.01	7.6	7.2	0.06	0.05
99KAM-18f	99KAM-18f rep	<.1	0.1	<1	<1	1.32	1.24	12.1	12.1	<.01	0.01	<.05	<.05	<.05	<.05	<.05	<.05	<.01	<.01	<.01	<.01	<.01	<.01	4.4	4.4	0.03	0.03
99KAM-13	99KAM-13 rep	0.1	0.1	<1	<1	1.31	1.42	12.0	13.4	0.02	0.02	<.05	<.05	<.05	<.05	<.05	<.05	<.01	<.01	<.01	<.01	<.01	<.01	4.5	4.9	0.05	0.05
99KAM-19	99KAM-19 rep	0.1	0.1	<1	<1	1.15	1.27	11.5	12.7	0.01	0.02	<.05	<.05	<.05	<.05	<.05	<.05	<.01	<.01	0.01	<.01	<.01	<.01	4.4	4.8	0.05	0.06
99SPI-4f	99SPI-4f rep	0.2	0.1	<1	<1	1.51	1.62	8.4	9.0	0.03	0.04	0.07	0.07	0.19	0.18	<.05	<.05	<.01	<.01	<.01	<.01	<.01	<.01	4.9	5.4	0.08	0.09
99HAPPY-1f	99HAPPY-1f rep	0.1	0.1	<1	<1	1.68	1.62	16.0	16.9	0.02	0.02	0.07	0.06	<.05	<.05	<.05	<.05	<.01	<.01	0.01	<.01	<.01	<.01	8.1	8.3	0.05	0.05

Sample Number		Ce (ppb)		Pr(ppb)		Nd (ppb)		Sm (ppb)		Eu (ppb)		Tb (ppb)		Gd (ppb)		Dy (ppb)		Ho (ppb)		Er (ppb)		Tm (ppb)		Yb (ppb)		Lu(ppb)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97-W8o	97W8o rep	0.13	0.13	0.022	0.022	0.079	0.083	0.013	0.013	<.005	<.005	<.005	<.005	0.009	0.007	<.005	0.006	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
99KAM-4f	99KAM-4f rep	0.11	0.11	0.020	0.021	0.071	0.069	0.009	0.013	<.005	<.005	<.005	<.005	<.005	0.010	<.005	0.008	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
99KAM-11f	99KAM-11f rep	0.08	0.08	0.013	0.014	0.049	0.048	0.010	0.007	<.005	<.005	<.005	<.005	0.008	0.007	0.007	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
99KAM-18f	99KAM-18f rep	0.03	0.03	0.007	0.006	0.020	0.013	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
99KAM-13	99KAM-13 rep	0.05	0.05	0.009	0.012	0.038	0.035	0.011	<.005	<.005	<.005	<.005	<.005	0.006	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
99KAM-19	99KAM-19 rep	0.07	0.08	0.010	0.011	0.043	0.048	<.005	0.007	<.005	<.005	<.005	<.005	0.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
99SPI-4f	99SPI-4f rep	0.12	0.13	0.019	0.021	0.076	0.067	0.008	0.008	<.005	<.005	<.005	<.005	0.010	0.006	<.005	<.005	<.005	<.005	<.005	0.006	<.005	<.005	0.006	<.005	<.005	<.005
99HAPPY-1f	99HAPPY-1f rep	0.06	0.06	0.012	0.012	0.044	0.051	0.008	0.011	<.005	<.005	<.005	<.005	<.005	0.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005

Sample Number		Re (ppb)		Tl (ppb)		Pb (ppb)		Bi (ppb)		Th (ppb)		U (ppb)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D
97-W8o	97W8o rep	-	-	<.005	<.005	<.01	<.01	-	-	-	-	0.026	0.025
99KAM-4f	99KAM-4f rep	<.005	<.005	<.005	0.006	0.01	0.02	<.01	<.01	0.06	0.05	0.023	0.024
99KAM-11f	99KAM-11f rep	<.005	<.005	<.005	<.005	0.02	0.01	<.01	<.01	0.04	0.03	0.009	0.011
99KAM-18f	99KAM-18f rep	<.005	<.005	<.005	<.005	0.01	0.01	<.01	<.01	<.01	<.01	0.008	0.010
99KAM-13	99KAM-13 rep	<.005	<.005	<.005	<.005	0.02	0.02	<.01	<.01	0.02	0.01	0.014	0.012
99KAM-19	99KAM-19 rep	<.005	<.005	<.005	<.005	<.01	0.01	<.01	<.01	<.01	<.01	0.009	0.009
99SPI-4f	99SPI-4f rep	<.005	<.005	<.005	0.007	0.01	0.01	<.01	<.01	0.05	0.04	0.042	0.041
99HAPPY-1f	99HAPPY-1f rep	<.005	<.005	<.005	0.006	0.04	0.04	<.01	<.01	0.03	0.04	0.026	0.025

Sample Number		Hg (ppb)	
Original	Duplicate	O	D
97-W8o	97W8o rep	<.002	<.002
99KAM-5	99KAM-5 rep	0.0008	0.0010
99KAM-10o	99KAM-10o rep	0.0025	0.0015
99KAM-15f	99KAM-15f rep	0.0013	0.0007
99KAM-19	99KAM-19 rep	0.0011	0.0011
99SPI-4	99SPI-4 rep	0.0018	0.0019

*f = filtered (1999); o = other filter used (1997)

Appendix XXIIa: Analytical Quality Control
Duplicates - Data

XIXb - Anions; high-performance IC

Sample Number		NO_2 (ppb)		NO_3 (ppb)		F (ppb)		PO_4 (ppb)		Br (ppb)		SO_4 (ppm)		Cl (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D
97-W7o	119-97-16	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	1.30	1.33	3.99	3.94
99KAM-2f	50-99-55	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	1.57	1.63	4.03	4.09
99KAM-12f	50-99-56	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	1.51	1.43	3.46	3.55
99SPI-3	50-99-57	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	1.20	1.20	2.15	2.11
99KAM-5	50-99-58	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	1.71	1.69	4.46	4.59

XIXc - TOC and DOC

Sample Number		TOC (ppm)		DOC (ppm)	
Original	Duplicate	O	D	O	D
99KAM-12	99KAM-12 rep	3.1	3.1	-	-
99KAM-19f	99KAM-19f rep	-	-	3.1	3.1

FIELD DUPLICATES

XIXa - Cations; by direct ICP-MS and Hg by HYD-ICP-MS

Sample Number		Li (ppb)		Be (ppb)		B (ppb)		Al (ppb)		Ti (ppb)		V (ppb)		Cr (ppb)		Fe (ppb)		Mn (ppb)		Co (ppb)		Ni (ppb)		Cu (ppb)		Zn (ppb)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99KAM-19f	DUP-1	0.541	0.525	<.005	0.005	2.5	2.5	4	5	<.5	<.5	<.1	<.1	0.3	0.3	16	14	0.5	0.4	<.05	<.05	<.2	0.3	0.6	0.6	<.05	<.05
99KAM-15	DUP-2	0.623	0.573	<.005	<.005	2.8	2.8	7	7	<.5	<.5	<.1	<.1	0.2	0.3	24	25	3.3	3.9	<.05	<.05	<.2	0.3	0.6	0.5	<.05	<.05
99KAM-10f	DUP-3	0.820	0.763	0.006	0.007	3.1	2.7	12	10	<.5	<.5	0.1	<.1	0.4	0.3	48	43	0.9	0.7	<.05	<.05	0.5	0.5	0.8	0.7	<.05	<.05
99KAM-5	DUP-4	0.762	0.674	<.005	<.005	2.9	2.9	21	19	0.8	0.8	0.1	0.1	0.4	0.3	90	86	5.5	6.2	<.05	<.05	0.5	0.4	0.7	0.7	1.6	1.5

Sample Number		As (ppb)		Se (ppb)		Rb (ppb)		Sr (ppb)		Y (ppb)		Mo (ppb)		Ag (ppb)		Cd (ppb)		In (ppb)		Sb(ppb)		Cs (ppb)		Ba (ppb)		La (ppb)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99KAM-19f	DUP-1	0.1	0.1	<1	<1	1.26	1.26	12.2	12.4	0.01	0.01	<.05	<.05	<.05	<.05	<.05	<.05	<.01	<.01	<.01	<.01	<.01	<.01	4.5	4.6	0.04	0.03
99KAM-15	DUP-2	0.2	<.1	<1	<1	1.37	1.25	12.5	11.9	0.02	0.02	<.05	<.05	<.05	<.05	<.05	<.05	<.01	<.01	<.01	<.01	<.01	<.01	4.6	4.2	0.05	0.06
99KAM-10f	DUP-3	0.1	0.2	<1	<1	1.69	1.63	16.1	16.3	0.03	0.03	0.06	0.05	<.05	<.05	<.05	<.05	<.01	<.01	<.01	0.01	<.01	<.01	6.5	6.2	0.07	0.08
99KAM-5	DUP-4	0.2	<.1	<1	<1	1.59	1.39	13.7	12.8	0.05	0.05	0.07	0.05	<.05	<.05	<.05	<.05	<.01	<.01	<.01	<.01	<.01	<.01	6.1	5.2	0.14	0.13

Sample Number		Ce (ppb)		Pr(ppb)		Nd (ppb)		Sm (ppb)		Eu (ppb)		Tb (ppb)		Gd (ppb)		Dy (ppb)		Ho (ppb)		Er (ppb)		Tm (ppb)		Yb (ppb)		Lu(ppb)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
99KAM-19f	DUP-1	0.04	0.04	0.007	0.006	0.024	0.025	<.005	0.007	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
99KAM-15	DUP-2	0.05	0.06	0.010	0.010	0.041	0.038	<.005	0.006	<.005	<.005	<.005	<.005	0.008	0.007	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
99KAM-10f	DUP-3	0.09	0.09	0.014	0.014	0.076	0.070	0.012	0.013	<.005	<.005	<.005	<.005	0.010	0.007	0.006	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
99KAM-5	DUP-4	0.20	0.20	0.028	0.031	0.113	0.101	0.012	0.016	<.005	<.005	<.005	<.005	0.012	0.010	0.010	0.011	<.005	<.005	0.007	<.005	<.005	<.005	<.005	0.006	<.005	<.005

Sample Number		Re (ppb)		Tl (ppb)		Pb (ppb)		Bi (ppb)		Th (ppb)		U (ppb)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D
99KAM-19f	DUP-1	<.005	<.005	<.005	<.005	<.01	<.01	<.01	<.01	<.01	<.01	0.009	0.011
99KAM-15	DUP-2	<.005	<.005	<.005	<.005	<.01	0.02	<.01	<.01	0.02	0.01	0.013	0.013
99KAM-10f	DUP-3	<.005	<.005	<.005	<.005	0.02	0.02	<.01	<.01	0.05	0.03	0.026	0.024
99KAM-5	DUP-4	<.005	<.005	<.005	<.005	0.03	0.03	<.01	<.01	0.05	0.05	0.033	0.025

Sample Number		Hg (ppb)	
Original	Duplicate	O	D
99KAM-19o	DUP-1	0.0011	0.0019
99KAM-15	DUP-2	0.0017	0.0013
99KAM-10o	DUP-3	0.0025	0.0016
99KAM-5	DUP-4	0.0008	0.0018

COMPARISON BETWEEN FILTERS

XIXa - Hg by HYD-ICP-MS

Sample Number		Hg (ppb)	
1997 filter	1999 filter	O	D
99KAM-10o	99KAM-10f	0.0025	0.0018
99KAM-19o	99KAM-19f	0.0011	0.0011

*f = filtered (1999); o = other filter used (1997)

Appendix XXIIa: Analytical Quality Control
Duplicates - Data

LABORATORY DUPLICATES

11) Appendix XX
Lithogeochemistry

XXa - Trace elements; by ICP-MS, lithium meta-borate fusion

Sample Number		Ag (ppm)		Ba (ppm)		Ce (ppm)		Cs (ppm)		Co (ppm)		Cu (ppm)		Dy (ppm)		Er (ppm)		Eu (ppm)		Gd (ppm)		Ga (ppm)		Hf (ppm)		Ho (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
ROCK99-169	ROCK99-169 dup	<1	<1	41.0	33.0	4.5	4.0	0.3	0.3	38.0	46.5	85	80	0.5	0.5	0.3	0.4	0.2	0.1	0.4	0.6	3	3	<1	<1	0.1	0.1

Sample Number		La (ppm)		Lu (ppm)		Nb (ppm)		Nd (ppm)		Ni (ppm)		Pb (ppm)		Pr (ppm)		Rb (ppm)		Sm (ppm)		Sn (ppm)		Sr (ppm)		Ta (ppm)		Tb (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
ROCK99-169	ROCK99-169 dup	3.0	2.0	<0.1	<0.1	<1	1	2.5	2.0	45	35	185	5	0.7	0.5	6.0	4.8	0.6	0.4	<1	<1	25.3	24.9	4.0	7.5	<0.1	<0.1

Sample Number		Th (ppm)		Tl (ppm)		Tm (ppm)		U (ppm)		V (ppm)		W (ppm)		Y (ppm)		Yb (ppm)		Zn (ppm)		Zr (ppm)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
ROCK99-169	ROCK99-169 dup	<1	<1	<0.5	0.5	<0.1	<0.1	<0.5	<0.5	25	25	117	199	2	2.5	0.3	0.3	135	120	20.0	20.0

XXb - Major and minor oxides; by XRF, lithium meta-borate fusion

Sample Number		Al_2O_3 (%)		CaO (%)		Cr_2O_3 (%)		Fe_2O_3 (%)		K_2O (%)		MgO (%)		MnO (%)		Na_2O (%)		P_2O_5 (%)		SiO_2 (%)		TiO_2 (%)		LOI (%)		Total (%)	
Original	Duplicate	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D	O	D
ROCK99-169	ROCK99-169 dup	1.45	1.42	2.05	2.07	<0.01	<0.01	1.46	1.45	0.20	0.21	0.03	0.01	0.03	0.02	<0.01	<0.01	0.01	0.02	92.16	92.05	0.08	0.08	1.60	1.64	99.07	98.97

Appendix XXII
Analytical Quality Control
Part B: Duplicates - Summary

Appendix XXIIb: Analytical Quality Control
Summary for Duplicates

LABORATORY DUPLICATES

1) Appendix VIII
Till geochemistry (<2 mm); by ICP-AES, Aqua Regia Leach (N=9)

SUMMARY	Al %	Ba ppm	Ca %	Co ppm	Cr* ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Na %	Ni ppm	P ppm
Mean	0.67	71	0.31	4	98	10	1.85	0.18	19	0.29	125	0.04	9	548
Range	0.35-1.30	40-130	0.10-0.45	3-6	12-310	3-20	1.14-4.47	0.09-0.38	5-30	0.16-0.50	70-170	0.02-0.08	5-16	460-610
Precision (±%)	**6.00**	**10.48**	**12.99**	**15.38**	**3.86**	**3.93**	**2.02**	**10.62**	**21.61**	**4.65**	**2.98**	**30.74**	**7.53**	**1.36**
Variance ratio	108.50	29.88	12.96	6.25	118.86	374.08	1741.82	47.05	8.83	117.70	155.48	1.62	39.94	85.97

SUMMARY	Pb ppm	Sr ppm	Ti %	V ppm	Zn* ppm
Mean	9	42	0.07	19	42
Range	4-18	21 - 60	0.06 - 0.07	16-22	12-200
Precision (±%)	**25.98**	**6.37**	**3.63**	**2.78**	**0.95**
Variance ratio	4.92	38.35	9.00	40.70	1578.72

2) Appendix IX
Till geochemistry (<0.063 mm); by ICP-AES, Aqua Regia Leach (N=7)

SUMMARY	Al %	Ba* ppm	Ca %	Co ppm	Cr ppm	Cu* ppm	Fe %	K* %	La ppm	Mg %	Mn ppm	Na %	Ni ppm	P ppm
Mean	0.73	63	0.37	4	21	12	1.28	0.17	26	0.31	117	0.02	10	824
Range	0.22-1.99	10-200	0.27-0.57	1-7	10-42	3-36	0.81-2.11	0.03-0.56	20-40	0.09-0.79	55-225	0.01-0.04	4-27	730-890
Precision (±%)	**11.56**	**10.05**	**10.02**	**14.97**	**8.63**	**0.65**	**5.34**	**4.09**	**17.52**	**7.45**	**7.50**	**12.03**	**6.28**	**1.12**
Variance ratio	109.23	13.89	12.11	19.50	66.05	9179.98	92.53	261.39	6.00	224.09	83.77	103.50	336.94	76.50

SUMMARY	Pb ppm	Sc ppm	Sr ppm	Ti %	V ppm	Zn ppm
Mean	6	2	42	0.06	19	20
Range	2-16	<1-4	22-75	0.03-0.10	12-32	6-54
Precision (±%)	**24.15**	**11.50**	**11.59**	**19.65**	**11.85**	**8.80**
Variance ratio	18.48	95.50	26.54	4.84	12.69	182.30

* : Log values were used for calculations of precision and variance ratio

Appendix XXIIb: Analytical Quality Control
Summary for Duplicates

LABORATORY DUPLICATES

3) Appendix X
Till geochemistry (<0.002 mm); by ICP-AES, Aqua Regia Leach (N=7)

SUMMARY	Al %	As ppm	Ba ppm	Be ppm	Ca %	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Na* %
Mean	2.91	3	253	1.2	0.69	13	67	60	3.65	0.79	69	1.42	426	0.16
Range	2.32-3.79	<2-8	140-340	0.5-2.0	0.46-0.84	12-17	51-84	26-98	3.19-4.28	0.53-1.09	60-90	1.02-1.76	365-495	0.04-0.47
Precision (±%)	**8.69**	**24.05**	**11.67**	**19.64**	**4.44**	**4.88**	**9.47**	**9.28**	**4.92**	**13.24**	**9.55**	**8.05**	**5.39**	**4.52**
Variance ratio	6.58	28.50	9.75	9.11	27.15	11.06	2.69	27.95	4.18	4.89	3.39	4.71	2.51	177.61

SUMMARY	Ni ppm	Pb ppm	Sc ppm	Sr ppm	Ti %	V ppm	Zn ppm
Mean	41	20	7	103	0.15	74	95
Range	27-55	16-28	6-9	63-138	0.13-0.17	47-61	62-126
Precision (±%)	**10.64**	**7.56**	**7.48**	**10.27**	**4.74**	**4.75**	**9.63**
Variance ratio	4.44	9.92	4.50	7.84	3.81	3.62	5.32

4) Appendix XI
Humus geochemistry (<2 mm); by ICP-AES, Aqua Regia Leach (N=6)

SUMMARY	Al %	As* ppm	Ba ppm	Ca %	Co ppm	Cr ppm	Cu ppm	Fe %	Hg ppb	K %	La ppm	Mg %	Mn ppm	Mo ppm
Mean	0.60	10	76	0.26	4	17	13	2.02	25	0.14	19	0.27	142	2
Range	0.31-1.08	<2-56	40-160	0.10-0.38	2-10	8-23	9-21	0.70-4.47	<10-70	0.07-0.22	<10-40	0.14-0.44	60-310	<1-6
Precision (±%)	**6.77**	**65.15**	**11.42**	**5.55**	**11.32**	**3.50**	**9.00**	**1.89**	**5.68**	**14.75**	**21.30**	**1.05**	**3.22**	**26.65**
Variance ratio	88.02	15.05	44.38	106.70	34.73	162.60	20.35	2592.17	913.00	12.94	18.50	2607.40	770.32	50.07

SUMMARY	Na %	Ni ppm	P ppm	Pb ppm	Sr ppm	Ti %	V ppm	Zn* ppm
Mean	0.03	9	487	8	34	0.06	18	54
Range	0.01-0.08	5-16	340-580	2-18	21-44	0.03-0.07	9-22	10-200
Precision (±%)	**47.79**	**7.86**	**0.84**	**27.71**	**6.14**	**5.02**	**3.30**	**1.82**
Variance ratio	3.78	64.40	1142.00	7.45	33.10	57.00	113.40	489.85

* : Log values were used for calculations of precision and variance ratio

Appendix XXIIb: Analytical Quality Control
Summary for Duplicates

LABORATORY DUPLICATES

6) Appendix XIII
Milestone AMA-254 Hg determinations

XIIId - Till (<0.002 mm) (N=7)

SUMMARY	Hg ppb
Mean	7
Range	3-16
Precision (±%)	**9.17**
Variance ratio	113.06

XIIIf - Till (<2 mm) (N=6)

SUMMARY	Hg ppb
Mean	11
Range	<10-19
Precision (±%)	**31.56**
Variance ratio	5.27

7) Appendix XIV
LOI, Organic Carbon and pH

XIVc - Till (<0.002 mm) (N_{LOI} = 7; $N_{organic\ C}$ = 4)

SUMMARY	LOI %	Organic C* %
Mean	3.5	1.1
Range	2.4-7.4	0.2-3.4
Precision (±%)	**13.63**	**0.00**
Variance ratio	16.79	-

* : Log values were used for calculations of precision and variance ratio

XIVd - Till (<0.063 mm) (N=5)

SUMMARY	LOI %
Mean	1.3
Range	0.2-2.4
Precision (±%)	**31.34**
Variance ratio	4.14

XIVe - Till (<2 mm) (N=5)

SUMMARY	LOI %
Mean	0.7
Range	0.2-1.2
Precision (±%)	**35.00**
Variance ratio	2.17

Appendix XXIIb: Analytical Quality Control
Summary for Duplicates

LABORATORY DUPLICATES

10) Appendix XIX
Water Chemistry

XIXa - Cations; by direct ICP-MS and Hg by HYD-ICP-MS (N=8)

SUMMARY	Li ppb	B ppb	Al ppb	Cr ppb	Fe ppb	Mn* ppb	Ni ppb	Cu ppb	As ppb	Rb ppb	Sr ppb	Y ppb	Ba ppb	La ppb
Mean	0.612	2.2	9	0.2	30	2.1	0.3	0.7	0.2	1.40	12.8	0.02	5.6	0.06
Range	0.488-0.798	1.3-3.2	3-19	0.1-0.3	18-63	0.3-4.5	0.1-0.5	0.5-1.3	<0.1-0.4	1.15-1.68	8.4-16.9	<0.01-0.04	4.4-8.3	0.03-0.10
Precision (±%)	**4.38**	**19.43**	**8.42**	**14.79**	**7.45**	**8.87**	**16.59**	**4.75**	**24.74**	**4.00**	**4.32**	**12.11**	**4.26**	**2.92**
Variance ratio	22.20	2.11	73.06	6.47	66.89	983.93	12.58	95.44	9.06	19.71	31.92	27.53	70.56	327.74

SUMMARY	Ce ppb	Pr ppb	Nd ppb	Sm* ppb	Pb ppb	Th ppb	U ppb	Hg ppb
Mean	0.08	0.014	0.052	0.0074	0.02	0.03	0.02	0.0013
Range	0.03-0.13	0.006-0.022	.013-.083	<.005-.0132	<.01-0.04	<.01-0.06	.008-.042	.0007-.0025
Precision (±%)	**4.17**	**7.39**	**7.52**	**21.84**	**18.00**	**22.78**	**5.49**	**26.24**
Variance ratio	221.38	58.37	58.17	2.45	26.23	19.58	231.83	3.98

XIXb - Anions; high-performance IC (N=5)

SUMMARY	SO_4 ppm	Cl ppm
Mean	1.46	3.64
Range	1.20-1.71	2.11-4.59
Precision (±%)	**2.31**	**1.57**
Variance ratio	73.40	514.30

* : Log values were used for calculations of precision and variance ratio

Appendix XXII
Analytical Quality Control
Part C: Standards - Data

Note:

With geochemistry (Appendices VIII to XII):
ECSS2: mean of 4 values, uncertified in house analysis summary, analyzed at Chemex by ICP-AES, aqua regia digestion
ECSS4: mean of 8 values, uncertified in house analysis summary, analyzed at Chemex by ICP-AES, aqua regia digestion
TCA8010: mean of 69 values, uncertified in house analysis summary, analyzed at Chemex by ICP-AES, aqua regia digestion
V6: mean of 25 values, uncertified in house analysis summary, analyzed at Chemex by ICP-AES, nitric-perchloric acid digestion (VG-1 package); for Hg, mean of 27 values, analyzed with Milestone AMA-254

With Milestone AMA-254 (Appendices XIII and XVI):
pine standard: NLST certified
ECSS2: mean of 4 values, uncertified in house analysis summary, analyzed at Chemex by by CV-AAS, aqua regia digestion
LKSD4: Canadian Certified Reference Materials Project, concentrated HNO_3 - HCl
TCA8010: mean of 54 values, uncertified in house analysis summary, analyzed at Chemex by CV-AAS, aqua regia digestion
Till-2: Canadian Certified Reference Materials Project, concentrated HNO3 - HCl
Till-1 194: value taken from Hall et al. (2001)
Till-3 1314: value taken from Hall et al. (2001)
Till-2 972: value taken from Hall et al. (2001)
Till-4 1145: value taken from Hall et al. (2001)

With LOI and LECO (Appendix XIV):
ECSS2: mean of 4 values, uncertified in house analysis summary, analyzed at Chemex
ECSS4: mean of 8 values, uncertified in house analysis summary, analyzed at Chemex
TCA8010: mean of 27 values, uncertified in house analysis summary, analyzed at Chemex
3408 std: uncertified in house analysis summary, analyzed at TSD Sedimentology Laboratory

With Sodium Pyrophosphate leach (Appendix XVII):
LKSD4: mean of 26 values, uncertified in house analysis summary, analyzed at MRD's Analytical Method Development Laboratory

With chemical fractionation (Appendix XVIII):
TCA8010: mean of 10 values, uncertified in house analysis summary, analyzed at Chemex by ICP-MS, Hot Hydroxylamine Leach

With water chemistry (Appendix XIX):
SLRS-3: mean of 14 values, uncertified in house analysis summary, analyzed at MRD's Analytical Method Development Laboratory
OTT-96: mean of 93 values, uncertified in house analysis summary, analyzed at MRD's Analytical Method Development Laboratory

With lithogeochemistry (Appendix XX):
RTS-1: Canadian Certified Reference Materials Project

Appendix XXIIc: Analytical Quality Control
Standards - Data

STANDARDS

1) Appendix VIII
Till geochemistry (<2 mm); by ICP-AES, Aqua Regia Leach

Sample Number		Ag (ppm)		Al (%)		As (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)		Ga (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS4	97MOB0095	<.2	<.2	0.74	1.03	2	<2	58	70	<.5	<.5	<2	<2	9.96	9.87	<.5	<.5	5	5	12	106	9	10	1.22	1.43	<10	<10
TCA8010	97MOB0098	<.2	<.2	0.90	0.98	7	4	29	30	<.5	<.5	<2	<2	0.41	0.45	<.5	<.5	7	7	24	24	28	30	1.55	1.64	<10	<10

Sample Number		Hg (ppb)		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (%)		Ni (ppm)		P (ppm)		Pb (ppm)		Sb (ppm)		Sc (ppm)		Sr (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS4	97MOB0095	<10	<10	0.17	0.29	10	10	0.69	0.79	240	265	<1	1	0.02	0.05	8	10	613	580	3	<2	<2	<2	3	3	187	212
TCA8010	97MOB0098	33	50	0.05	0.06	11	20	0.39	0.42	213	220	<1	<1	<.01	0.01	14	15	477	480	2	2	<2	<2	5	5	21	24

Sample Number		Ti (%)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D
ECSS4	97MOB0095	0.04	0.06	<10	<10	<10	<10	18	22	<10	<10	19	22
TCA8010	97MOB0098	0.07	0.09	<10	<10	<10	<10	25	27	<10	<10	27	28

2) Appendix IX
Till geochemistry (<0.063 mm); by ICP-AES, Aqua Regia Leach

Sample Number		Ag (ppm)		Al (%)		As (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS4	98PL0081	<.2	<.2	0.74	0.57	2	<2	-	-	58	50	<.5	<.5	<2	<2	9.96	11.15	<.5	<.5	5	4	12	10	9	8	1.22	1.07
TCA8010	98PL0084	<.2	<.2	0.90	0.93	7	8	<10	-	29	30	<.5	<.5	<2	<2	0.41	0.42	<.5	<.5	7	7	24	24	28	29	1.55	1.60
TCA8010	99IG0192	<.2	<.2	0.90	0.81	7	<2	<10	10	29	30	<.5	<.5	<2	<2	0.41	0.35	<.5	<.5	7	7	24	24	28	27	1.55	1.48

Sample Number		Ga (ppm)		Hg (ppb)		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (%)		Ni (ppm)		P (ppm)		Pb (ppm)		S (%)		Sb (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS4	97MOB0095	<10	<10	<10	<10	0.17	0.11	10	10	0.69	0.66	240	220	<1	<1	0.02	0.01	8	7	613	640	3	2	-	-	<2	<2
TCA8010	97MOB0098	<10	<10	33	30	0.05	0.05	11	10	0.39	0.40	213	215	<1	<1	<.01	<.01	14	15	477	510	2	<2	<.01	-	<2	<2
TCA8010	99IG0192	<10	<10	33	20	0.05	0.04	11	10	0.39	0.34	213	195	<1	<1	<.01	<.01	14	13	477	470	<2	2	<.01	<.01	<2	<2

Sample Number		Sc (ppm)		Sr (ppm)		Ti (%)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS4	97MOB0095	3	2	187	220	0.04	0.03	<10	<10	<10	<10	18	14	<10	<10	19	16
TCA8010	97MOB0098	5	5	21	23	0.07	0.08	<10	<10	<10	<10	25	26	<10	<10	27	26
TCA8010	99IG0192	5	4	21	16	0.07	0.05	<10	<10	<10	<10	25	21	<10	<10	27	24

Appendix XXIIc: Analytical Quality Control
Standards - Data

STANDARDS

3) Appendix X
Till geochemistry (<0.002 mm); by ICP-AES, Aqua Regia Leach

Sample Number		Ag (ppm)		Al (%)		As (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS4	98PL0088	<.2	<.2	0.74	0.76	2	<2	-	-	58	60	<.5	<.5	<2	<2	9.96	10.10	<.5	<.5	5	4	12	11	9	8	1.22	1.16
TCA8010	98PL0091	<.2	<.2	0.90	0.85	7	2	<10	-	29	30	<.5	<.5	<2	<2	0.41	0.39	<.5	<.5	7	7	24	21	28	28	1.55	1.49
TCA8010	99IG0188	<.2	<.2	0.90	0.82	7	12	<10	10	29	20	<.5	<.5	<2	<2	0.41	0.37	<.5	<.5	7	6	24	23	28	26	1.55	1.49

Sample Number		Ga (ppm)		Hg (ppb)		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (%)		Ni (ppm)		Pb (ppm)		S (%)		Sb (ppm)		Sc (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS4	98PL0088	<10	<10	<10	<10	0.17	0.18	10	10	0.69	0.67	240	230	<1	<1	0.02	0.01	8	8	3	<2	-	-	<2	<2	3	3
TCA8010	98PL0091	<10	<10	33	30	0.05	0.05	11	10	0.39	0.37	213	200	<1	<1	<.01	<.01	14	15	2	4	<.01	-	<2	<2	5	5
TCA8010	99IG0188	<10	<10	33	30	0.05	0.04	11	10	0.39	0.34	213	200	<1	<1	<.01	0.01	14	13	<2	2	<.01	<.01	<2	<2	5	4

Sample Number		Sr (ppm)		Ti (%)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS4	98PL0088	187	200	0.04	0.04	<10	<10	<10	<10	18	18	<10	<10	19	18
TCA8010	98PL0091	21	19	0.07	0.07	<10	<10	<10	<10	25	25	<10	<10	27	26
TCA8010	99IG0188	21	18	0.07	0.06	<10	<10	<10	<10	25	22	<10	<10	27	28

4) Appendix XI
Humus geochemistry (<2 mm); by ICP-AES, Aqua Regia Leach

Sample Number		Ag (ppm)		Al (%)		As (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (%)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (%)		Ga (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS2	98PL0102	<.2	<.2	0.91	0.86	<2	<2	28	40	<.5	<.5	<2	<2	0.21	0.18	<.5	<.5	1	<1	7	6	<1	<1	1.75	1.68	<10	<10

Sample Number		Hg (ppb)		K (%)		La (ppm)		Mg (%)		Mn (ppm)		Mo (ppm)		Na (%)		Ni (ppm)		P (ppm)		Pb (ppm)		Sb (ppm)		Sc (ppm)		Sr (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
ECSS2	98PL0102	30	40	0.04	0.03	13	10	0.09	0.08	53	35	<1	<1	0.01	0.01	2	3	925	920	4	<2	<2	2	1	1	7	6

Sample Number		Ti (%)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D
ECSS2	98PL0102	0.06	0.05	<10	<10	<10	<10	36	34	<10	<10	23	14

5) Appendix XII
Peat geochemistry; by ICP-AES, nitric-perchloric acid digestion

Sample Number		Ag (ppm)		Al (ppm)		As (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Ca (ppm)		Cd (ppm)		Co (ppm)		Cr (ppm)		Cu (ppm)		Fe (ppm)		Ga (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
V6	00IG0017	<.10	<.10	448	400	<2	<2	5	5	<.20	<.20	<1.00	<1.00	5940	6300	0.20	<.20	<.50	<.50	3.4	2.5	6.3	5.5	654	650	<5	<5

Sample Number		Hg (ppb)		K (ppm)		La (ppm)		Mg (ppm)		Mn (ppm)		Mo (ppm)		Na (ppm)		Ni (ppm)		P (ppm)		Pb (ppm)		Sb (ppm)		Sc (ppm)		Sr (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
V6	00IG0017	41	50	764	750	<5	<5	856	850	37	36	1.3	0.5	62	100	3.0	2.5	338	355	12.0	10.5	<2	<2	<2	<2	29	26

Sample Number		Ti (ppm)		Tl (ppm)		U (ppm)		V (ppm)		W (ppm)		Zn (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D
V6	00IG0017	<50	<50	<5	<5	<5	<5	1.3	1.5	<2	<2	29	26

Appendix XXIIc: Analytical Quality Control
Standards - Data

STANDARDS

6) Appendix XIII
Milestone AMA-254 Hg determinations

XIIIa - Dwarf Birch Leaves

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
pine standard	pine stan-1	150	125
pine standard	pine stan-2	150	127
pine standard	pine stan-3	150	125

XIIIc - Humus (<2 mm)

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
ECSS2	97mobECSS2-1	30	29
ECSS2	97mobECSS2-2	30	35
LKSD4	LKSD4-1	190	187
LKSD4	LKSD4-2	190	186
TCA8010	99IG0194	33	28

XIIId - Till (<0.002 mm)

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
TCA8010	97mobTCA1	33	34
TCA8010	97mobTCA2	33	34
TCA8010	97mobTCA3	33	34
TCA8010	97mobTCA4	33	35
TCA8010	97mobTCA5	33	35
TCA8010	97mobTCA6	33	37
TCA8010	99IG0194	33	28
TILL-2	TILL-2a	74	68
TILL-2	TILL-2b	74	68
TILL-2	TILL-2c	74	68
TILL-2	TILL-2d	74	69
TILL-2	TILL-2e	74	68
TILL-2	TILL-2f	74	67
TILL-2	TILL-2g	74	68
TILL-2	TILL-2h	74	69
TILL-2	TILL-2i	74	69
TILL-2	TILL-2j	74	68

XIIIe - Till (<0.063 mm)

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
TCA8010	99IG0194	33	28

XIIIf - Till (<2 mm)

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
TCA8010	99IG0194	33	28

XIIIg - Bedrock

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
TILL-2	TILL-2h	74	67

XIIIh - Archives till samples (<0.063 mm)

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
TILL-1 194	TILL-1 194a	92	91
TILL-1 194	TILL-1 194b	92	92
TILL-1 194	TILL-1 194c	92	92
TILL-1 194	TILL-1 194d	92	87
TILL-1 194	TILL-1 194e	92	92
TILL-1 194	TILL-1 194f	92	89
TILL-1 194	TILL-1 194g	92	93
TILL-1 194	TILL-1 194h	92	89
TILL-3 1314	TILL-3 1314a	110	107
TILL-3 1314	TILL-3 1314b	110	106
TILL-3 1314	TILL-3 1314c	110	107
TILL-3 1314	TILL-3 1314d	110	103

STANDARDS

7) Appendix XIV
LOI, Organic Carbon and pH

XIVb - Humus (<2 mm)

Sample Number		LOI (%)		Organic C (%)	
Standard	Duplicate	S	D	S	D
ECSS2	98PL0102	14.2	14.8	-	-
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.1
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2

XIVc - Till (<0.002 mm)

Sample Number		LOI (%)	
Original	Duplicate	O	D
ECSS4	98PL0088	1.8	2.0
TCA8010	98PL0091	1.4	1.4
TCA8010	99IG0188	1.4	1.6

XIVd - Till (<0.063 mm)

Sample Number		LOI (%)		Organic C (%)	
Original	Duplicate	O	D	O	D
ECSS4	98PL0081	1.8	1.8	-	-
TCA8010	98PL0084	1.4	1.4	-	-
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2

XIVe - Till (<2 mm)

Sample Number		LOI (%)		Organic C (%)	
Original	Duplicate	O	D	O	D
ECSS4	98PL0095	1.8	1.6	-	-
TCA8010	98PL0098	1.4	1.2	-	-
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.1
3408 std	3408 std	-	-	0.2	0.2
3408 std	3408 std	-	-	0.2	0.2

STANDARDS

8) Appendix XVI
Physical Partitioning in till: Milestone AMA-254 Hg determinations

XVIb - <0.002 mm fraction

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
TILL-2 972	TILL-2 972a	66	67
TILL-4 1145	TILL-4 1145a	24	23
TILL-4 1145	TILL-4 1145b	24	24

XVIc - 0.002 to 0.063 mm fraction

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
TILL-4 1145	TILL-4 1145a	24	24
TILL-4 1145	TILL-4 1145b	24	24
TILL-4 1145	TILL-4 1145c	24	24

XVId, e and f - 63 to 125 µm, 125 to 250 µm and 250 µm to 2 mm fractions

Sample Number		Hg (ppb)	
Standard	**Duplicate**	**S**	**D**
TILL-3 1314	TILL-3 1314a	110	107
TILL-3 1314	TILL-3 1314b	110	107
TILL-3 1314	TILL-3 1314c	110	107

9) Appendix XVII
Hg Fractionation, by HYD-ICP-MS, Sodium Pyrophosphate Digestion

XVIIa and b - Humus (<2 mm) and Till (<2 µm)

Sample Number		Hg (ppb)		SOC (ppm)	
Standard	**Duplicate**	**S**	**D**	**S**	**D**
LKSD4	LKSD4a	21	18	25437	25900
LKSD4	LKSD4b	21	17	25437	25800
LKSD4	LKSD4c	21	18	25437	26400

Appendix XXIIc: Analytical Quality Control
Standards - Data

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10) Appendix XVIII
Chemical Fractionation Studies

XVIIIb, c and d - Till (<0.002, <0.063 and <2 mm fractions); by ICP-MS, Hot Hydroxylamine Leach

Sample Number		Ag (ppm)		Al (ppm)		As (ppm)		Au (ppm)		B (ppm)		Ba (ppm)		Be (ppm)		Bi (ppm)		Br (ppm)		Ca (ppm)		Cd (ppm)		Ce (ppm)		Co (ppm)		Cr (ppm)	
Standard	**Duplicate**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**
TCA8010	99IG0188	0.028	0.016	2759	2000	2.28	1.7	<.05	<0.05	<3	<2	24.36	18.05	0.12	0.10	0.12	0.065	<2	<2	2299	2170	0.03	0.01	15.7	18.5	3.0	2.7	4.79	3.95

Sample Number		Cs (ppm)		Cu (ppm)		Dy (ppm)		Er (ppm)		Eu (ppm)		Fe (ppm)		Ga (ppm)		Gd (ppm)		Ge (ppm)		Hf (ppm)		Hg (ppb)		Ho (ppm)		I (ppm)		In (ppm)	
Standard	**Duplicate**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**
TCA8010	99IG0188	0.082	0.105	13.3	12.7	1.16	1.29	0.59	0.67	0.343	0.375	3773	2710	0.5	0.5	1.603	1.745	<.1	<0.1	0.03	0.03	<30	<30	0.21	0.23	0.7	0.8	<.005	<0.005

Sample Number		K (ppm)		La (ppm)		Li (ppm)		Lu (ppm)		Mg (ppm)		Mn (ppm)		Mo (ppm)		Na (ppm)		Nb (ppm)		Nd (ppm)		Ni (ppm)		P (ppm)		Pb (ppm)		Pr (ppm)	
Standard	**Duplicate**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**
TCA8010	99IG0188	143	95	8.32	9.41	1.1	1.1	0.07	0.08	849	822	193.2	109.5	0.07	0.06	49	40	0.09	0.07	8.13	9.72	4.1	2.8	417	455	4.1	3.2	2.16	2.52

Sample Number		Rb (ppm)		Re (ppm)		Sb (ppm)		Se (ppm)		Sm (ppm)		Sn (ppm)		Sr (ppm)		Ta (ppm)		Tb (ppm)		Te (ppm)		Th (ppm)		Ti (ppm)		Tl (ppm)		Tm (ppm)	
Standard	**Duplicate**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**
TCA8010	99IG0188	1.14	1.07	<.001	<.001	0.319	0.325	<.5	<.5	1.68	1.86	<.05	<.05	8.7	9.5	<.01	<.01	0.22	0.25	<.05	<.05	0.20	0.37	49	46	0.011	0.015	0.077	0.085

Sample Number		U (ppm)		V (ppm)		W (ppm)		Y (ppm)		Yb (ppm)		Zn (ppm)		Zr (ppm)	
Standard	**Duplicate**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**	**S**	**D**
TCA8010	99IG0188	0.19	0.21	5.06	4.75	0.01	<0.01	5.66	5.85	0.471	0.535	10.0	9.2	1.14	0.75

Appendix XXIIc: Analytical Quality Control
Standards - Data

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11) Appendix XIX
Water Chemistry

XIXa - Cations; by direct ICP-MS and Hg by HYD-ICP-MS

Sample Number		Li (ppb)		Be (ppb)		B (ppb)		Al (ppb)		Ti (ppb)		V (ppb)		Cr (ppb)		Fe (ppb)		Mn (ppb)		Co (ppb)		Ni (ppb)		Cu (ppb)		Zn (ppb)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
OTT-96	OTT-96a	0.528	0.562	0.007	0.006	5.5	-	67	62	1.8	1.4	0.3	0.4	0.3	0.4	99	112	4.9	5.3	0.03	< 0.05	0.7	0.7	1.4	1.5	1.0	1.0
OTT-96	OTT-96b	0.528	0.519	0.007	< 0.005	5.5	-	67	58	1.8	1.3	0.3	0.3	0.3	0.4	99	101	4.9	5.0	0.03	< 0.05	0.7	0.6	1.4	1.4	1.0	1.0
OTT-96	OTT-96c	0.528	0.574	0.007	0.008	5.5	6.5	67	74	1.8	2.2	0.3	0.4	0.3	0.4	99	110	4.9	5.4	0.03	< 0.05	0.7	0.8	1.4	1.6	1.0	1.0
OTT-96	OTT-96d	0.528	0.597	0.007	0.016	5.5	6.9	67	78	1.8	2.1	0.3	0.3	0.3	0.4	99	112	4.9	5.3	0.03	< 0.05	0.7	0.7	1.4	1.5	1.0	1.0
OTT-96	OTT-96e	0.528	0.585	0.007	0.007	5.5	6.3	67	74	1.8	2.2	0.3	0.4	0.3	0.4	99	113	4.9	5.4	0.03	< 0.05	0.7	0.6	1.4	1.5	1.0	1.0
OTT-96	OTT-96f	0.528	0.570	0.007	0.009	5.5	3.7	67	72	1.8	2.1	0.3	0.3	0.3	0.4	99	108	4.9	5.1	0.03	< 0.05	0.7	0.6	1.4	1.5	1.0	1.0
OTT-96	OTT-96g	0.528	0.582	0.007	0.007	5.5	6.4	67	65	1.8	2.1	0.3	0.3	0.3	0.4	99	111	4.9	5.2	0.03	< 0.05	0.7	0.6	1.4	1.5	1.0	1.1
SLRS-3	SLRS-3a	0.543	0.545	0.005	< 0.005	3.9	4.2	34	35	1.1	1.4	0.4	0.4	0.4	0.4	98	101	4.1	4.2	0.02	< 0.05	0.9	0.7	1.5	1.6	1.3	1.4
SLRS-3	SLRS-3b	0.543	0.489	0.005	0.007	3.9	3.7	34	33	1.1	1.2	0.4	0.3	0.4	0.4	98	90	4.1	3.9	0.02	< 0.05	0.9	0.7	1.5	1.4	1.3	1.3
SLRS-3	SLRS-3c	0.543	0.565	0.005	0.007	3.9	3.9	34	35	1.1	1.3	0.4	0.3	0.4	0.4	98	105	4.1	4.3	0.02	< 0.05	0.9	0.8	1.5	1.6	1.3	1.6

Sample Number		As (ppb)		Se (ppb)		Rb (ppb)		Sr (ppb)		Y (ppb)		Mo (ppb)		Ag (ppb)		Cd (ppb)		In (ppb)		Sb(ppb)		Cs (ppb)		Ba (ppb)		La (ppb)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
OTT-96	OTT-96a	0.8	1.1	<1	< 1	1.51	1.62	46.0	49.8	0.13	0.13	0.37	0.39	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.07	0.09	<0.01	< 0.01	16.5	17.1	0.25	0.26
OTT-96	OTT-96b	0.8	0.7	<1	< 1	1.51	1.55	46.0	48.3	0.13	0.13	0.37	0.37	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.07	0.06	<0.01	< 0.01	16.5	16.5	0.25	0.25
OTT-96	OTT-96c	0.8	0.9	<1	< 1	1.51	1.69	46.0	49.1	0.13	0.14	0.37	0.37	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.07	0.08	<0.01	< 0.01	16.5	18.1	0.25	0.27
OTT-96	OTT-96d	0.8	0.9	<1	< 1	1.51	1.64	46.0	50.0	0.13	0.13	0.37	0.36	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.07	0.09	<0.01	< 0.01	16.5	17.7	0.25	0.30
OTT-96	OTT-96e	0.8	0.8	<1	< 1	1.51	1.64	46.0	49.0	0.13	0.14	0.37	0.38	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.07	0.08	<0.01	< 0.01	16.5	18.3	0.25	0.28
OTT-96	OTT-96f	0.8	0.8	<1	< 1	1.51	1.63	46.0	48.1	0.13	0.13	0.37	0.41	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.07	0.07	<0.01	< 0.01	16.5	17.9	0.25	0.27
OTT-96	OTT-96g	0.8	0.8	<1	< 1	1.51	1.51	46.0	49.2	0.13	0.13	0.37	0.35	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.07	0.08	<0.01	< 0.01	16.5	17.5	0.25	0.28
SLRS-3	SLRS-3a	0.7	0.6	<1	< 1	1.64	1.67	33.9	35.5	0.13	0.13	0.22	0.22	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.16	0.17	<0.01	< 0.01	14.9	15.2	0.26	0.27
SLRS-3	SLRS-3b	0.7	0.6	<1	< 1	1.64	1.57	33.9	33.4	0.13	0.11	0.22	0.19	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.16	0.15	<0.01	< 0.01	14.9	13.5	0.26	0.25
SLRS-3	SLRS-3c	0.7	0.8	<1	< 1	1.64	1.70	33.9	38.3	0.13	0.15	0.22	0.24	<0.05	< 0.05	<0.05	< 0.05	<0.01	< 0.01	0.16	0.19	<0.01	< 0.01	14.9	16.9	0.26	0.29

Sample Number		Ce (ppb)		Pr(ppb)		Nd (ppb)		Sm (ppb)		Eu (ppb)		Tb (ppb)		Gd (ppb)		Dy (ppb)		Ho (ppb)		Er (ppb)		Tm (ppb)		Yb (ppb)		Lu(ppb)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
OTT-96	OTT-96a	0.30	0.31	0.061	0.064	0.238	0.240	0.040	0.040	0.007	0.005	<.005	< 0.005	0.032	0.030	0.023	0.020	<.005	0.005	0.013	0.012	<.005	< 0.005	0.013	0.011	<.005	< 0.005
OTT-96	OTT-96b	0.30	0.29	0.061	0.060	0.238	0.246	0.040	0.044	0.007	0.006	<.005	< 0.005	0.032	0.030	0.023	0.020	<.005	< 0.005	0.013	0.016	<.005	< 0.005	0.013	0.012	<.005	< 0.005
OTT-96	OTT-96c	0.30	0.34	0.061	0.066	0.238	0.264	0.040	0.045	0.007	0.006	<.005	0.006	0.032	0.029	0.023	0.022	<.005	< 0.005	0.013	0.015	<.005	< 0.005	0.013	0.010	<.005	< 0.005
OTT-96	OTT-96d	0.30	0.33	0.061	0.067	0.238	0.263	0.040	0.043	0.007	0.008	<.005	< 0.005	0.032	0.032	0.023	0.028	<.005	< 0.005	0.013	0.010	<.005	< 0.005	0.013	0.012	<.005	< 0.005
OTT-96	OTT-96e	0.30	0.32	0.061	0.065	0.238	0.272	0.040	0.048	0.007	0.009	<.005	< 0.005	0.032	0.041	0.023	0.021	<.005	0.006	0.013	0.011	<.005	< 0.005	0.013	0.011	<.005	< 0.005
OTT-96	OTT-96f	0.30	0.32	0.061	0.070	0.238	0.228	0.040	0.043	0.007	0.011	<.005	< 0.005	0.032	0.037	0.023	0.026	<.005	0.006	0.013	0.013	<.005	< 0.005	0.013	0.012	<.005	< 0.005
OTT-96	OTT-96g	0.30	0.30	0.061	0.069	0.238	0.229	0.040	0.046	0.007	0.009	<.005	< 0.005	0.032	0.027	0.023	0.032	<.005	< 0.005	0.013	0.012	<.005	< 0.005	0.013	0.011	<.005	< 0.005
SLRS-3	SLRS-3a	0.30	0.33	0.062	0.070	0.238	0.260	0.050	0.060	0.007	0.008	<.005	< 0.005	0.032	0.033	0.023	0.029	<.005	< 0.005	0.013	0.013	<.005	< 0.005	0.013	0.014	<.005	< 0.005
SLRS-3	SLRS-3b	0.30	0.28	0.062	0.059	0.238	0.216	0.050	0.045	0.007	0.005	<.005	< 0.005	0.032	0.030	0.023	0.022	<.005	< 0.005	0.013	0.009	<.005	< 0.005	0.013	0.012	<.005	< 0.005
SLRS-3	SLRS-3c	0.30	0.33	0.062	0.071	0.238	0.244	0.050	0.044	0.007	0.007	<.005	< 0.005	0.032	0.026	0.023	0.030	<.005	< 0.005	0.013	0.011	<.005	< 0.005	0.013	0.012	<.005	< 0.005

Sample Number		Re (ppb)		Tl (ppb)		Pb (ppb)		U (ppb)	
Standard	Duplicate	S	D	S	D	S	D	S	D
OTT-96	OTT-96a	0.010	-	0.005	0.005	0.10	0.10	0.084	0.083
OTT-96	OTT-96b	0.010	-	0.005	< 0.005	0.10	0.10	0.084	0.083
OTT-96	OTT-96c	0.010	0.015	0.005	0.007	0.10	0.11	0.084	0.093
OTT-96	OTT-96d	0.010	0.011	0.005	< 0.005	0.10	0.11	0.084	0.100
OTT-96	OTT-96e	0.010	0.011	0.005	< 0.005	0.10	0.11	0.084	0.088
OTT-96	OTT-96f	0.010	0.010	0.005	0.006	0.10	0.12	0.084	0.086
OTT-96	OTT-96g	0.010	0.010	0.005	< 0.005	0.10	0.11	0.084	0.081
SLRS-3	SLRS-3a	0.005	< 0.005	0.008	0.009	0.08	0.08	0.047	0.046
SLRS-3	SLRS-3b	0.005	< 0.005	0.008	0.007	0.08	0.08	0.047	0.049
SLRS-3	SLRS-3c	0.005	0.006	0.008	0.010	0.08	0.09	0.047	0.052

Appendix XXIIc: Analytical Quality Control
Standards - Data

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12) Appendix XX
Lithogeochemistry

XXa - Trace elements; by ICP-MS, lithium meta-borate fusion

Sample Number		Ag (ppm)		Ba (ppm)		Ce (ppm)		Cs (ppm)		Co (ppm)		Cu (ppm)		Dy (ppm)		Er (ppm)		Eu (ppm)		Gd (ppm)		Ga (ppm)		Hf (ppm)		Ho (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
RTS-1	00IG 0019	<3	6	123.0	117.5	-	34.5	-	1.7	16.6	15.0	595	540	-	4.4	-	2.9	-	1.2	-	5.4	-	44	-	3	-	0.9

Sample Number		La (ppm)		Lu (ppm)		Nb (ppm)		Nd (ppm)		Ni (ppm)		Pb (ppm)		Pr (ppm)		Rb (ppm)		Sm (ppm)		Sn (ppm)		Sr (ppm)		Ta (ppm)		Tb (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
RTS-1	00IG 0019	-	15.0	-	0.4	-	5	-	20.0	22	15	105	80	-	4.7	-	14.4	-	5.3	-	155	60.0	58.8	-	<0.5	-	0.8

Sample Number		Th (ppm)		Tl (ppm)		Tm (ppm)		U (ppm)		V (ppm)		W (ppm)		Y (ppm)		Yb (ppm)		Zn (ppm)		Zr (ppm)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
RTS-1	00IG 0019	-	<1	-	3	-	0.3	-	4.0	-	125	-	11	-	22.5	-	2.7	553	460	110.0	103.0

XXb - Major and minor oxides; by XRF, lithium meta-borate fusion

Sample Number		Al_2O_3 (%)		CaO (%)		Cr_2O_3 (%)		Fe_2O_3 (%)		K_2O (%)		MgO (%)		MnO (%)		Na_2O (%)		P_2O_5 (%)		SiO_2 (%)		TiO_2 (%)		LOI (%)		Total (%)	
Standard	Duplicate	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
RTS-1	00IG 0019	8.05	7.95	3.74	4.04	<0.01	<0.01	28.08	29.37	0.63	0.70	4.43	4.45	0.25	0.25	0.67	0.60	0.14	0.11	42.55	43.30	0.68	0.73	-	7.90	-	99.40

Appendix XXIII
Published Datasets

1) DIAND NWT EGS 1998-15: A list and description of mineral occurrences derived from the NORMIN database (in digital format only).
Source: Goff, S.P. and Mills, A., 1998. Significant mineral occurrences of the Central Rankin - Ennadai Supracrustal Belt: Spi-Kaminak-Quartzite Lakes & Heninga-Kogtok Lakes (NTS 55 E/13-14, 55 L/1-16, 65 H/15-16 & 65 I/1-2); DIAND NWT Geology Division EGS 1998-15.
Formats: wb3, wks, Corel WordPerfect 8 Document (wpd), Microsoft Excel Worksheet (xls)

2) GSC Open File 2132: Geochemical results for the silt and clay-sized fraction of till samples collected in the early 1970's and reanalysed in 1988-89 (in digital format only).
Source: Shilts, W.W. and Wyatt, P.H., 1989. Gold and base metal exploration using drift as a sample medium, Kaminak Lake - Turquetil Lake area, District of Keewatin; GSC Open File 2132 (Appendix 3).
Formats: dat, wk1
Note: Trace and major elements determined by ICP-AES, aqua regia digestion, on the <0.063 mm fraction; gold concentrations determined by Fire Assay ICP-atomic fluorescence spectrometry, on the <0.063 mm fraction.

3) Lake fish Hg data: Hg levels in Kaminak Lake fish and in other nearby lakes.
Format: Microsoft Excel Worksheet (xls)
Fish collected in 1971 and analysed at the Freshwater Institute (DFO):
Source: Sherbin, I.G., 1979. Mercury in the Canadian Environment; Canadian Environmental Protection Service, Environment Canada, Report EPS 3-EC-79-6 (Appendix 2).
Fish collected in 1995-1996 and analysed at the Freshwater Institute:
Source:
Unpublished Hg levels kindly provided by Lyle Lockhart (DFO) in 2000.

4) Surficial geology map compilation: A digital compilation of the surficial geology of the Kaminak Lake area (mainly unit polygons) between latitudes 61°45' and 62°35' N and longitudes 94° and 96° (in digital format only).
Sources:
Arsenault, L., Aylsworth, J.M., Kettles, I.M. and Shilts, W.W., 1981. Surficial geology, Kaminak Lake, District of Keewatin; Geological Survey of Canada, Map 7-1979, 1:125 000;
Arsenault, L., Aylsworth, J.M., Cunningham, C.M. and Shilts, W.W., 1982. Surficial geology, Eskimo Point, District of Keewatin; Geological Survey of Canada, Map 8-1980, 1:125 000.
Formats: Acrobat PDF
Note: Ice flow indicators from McMartin and Henderson (1999) and Aylsworth and Shilts (1989).

5) GSC Open File 3649: The most recent bedrock map compilation, completed as part of the NATMAP Western Churchill Project (in digital format only).
Source: Irwin, D.A., Hanmer, S., Sandeman, H.A., Rainbird, R.H., Peterson, T.D., Relf, C., Ryan, J.J. , Goff, S.P. and Kerswill, J.A.,1998. Geology, Carr-Kaminak-Quartzite lakes area, Kivalliq region, Northwest Territories; Geological Survey of Canada, Open file 3649, scale 1:125 000.
Format: Acrobat PDF

Appendix XXIII: Published Datasets
Part 3: Hg in Kaminak Lake Fish

FIELD No	YEAR	LATITUDE	LONGITUDE	SPECIES	ORGAN NAME	FORK LENGTH (mm)	WEIGHT (g)	Hg (ppm)	Mean Hg (ppm)	N	SOURCE
-	May-71	62°10'	95°00'	lake trout	-	-	-	-	2.00	11	Sherbin, 1979
-	May-71	62°10'	95°00'	lake trout	-	-	-	-	0.85	5	Sherbin, 1979
-	May-71	62°10'	95°00'	lake trout	-	-	-	-	0.73	20	Sherbin, 1979
-	May-71	62°10'	95°00'	lake trout	-	-	-	-	0.72	11	Sherbin, 1979
-	May-71	62°10'	95°00'	lake trout	-	-	-	-	0.61	9	Sherbin, 1979
-	May-71	62°10'	95°00'	lake trout	-	-	-	-	0.57	14	Sherbin, 1979
-	May-71	62°10'	95°00'	lake whitefish	-	-	-	-	0.19	6	Sherbin, 1979
-	May-71	62°10'	95°00'	lake whitefish	-	-	-	-	0.10	25	Sherbin, 1979
-	May-71	62°10'	95°00'	lake whitefish	-	-	-	-	0.09	6	Sherbin, 1979
-	May-71	62°10'	95°00'	lake trout	muscle	419	1133	0.71	-	-	Lockhart, per. com., 2000
-	May-71	62°10'	95°00'	lake trout	muscle	571	3004	1.22	-	-	Lockhart, per. com., 2000
-	May-71	62°10'	95°00'	lake trout	muscle	469	1445	1.19	-	-	Lockhart, per. com., 2000
-	May-71	62°10'	95°00'	lake trout	muscle	419	1190	1.07	-	-	Lockhart, per. com., 2000
-	May-71	62°10'	95°00'	lake trout	muscle	304	453	0.75	-	-	Lockhart, per. com., 2000
Kaminak - 1	1995 or 1996	-	-	lake trout	muscle	510	1318	0.61	-	-	Lockhart, per. com., 2000
Kaminak - 2	1995 or 1996	-	-	lake trout	muscle	590	2150	1.07	-	-	Lockhart, per. com., 2000
Kaminak - 3	1995 or 1996	-	-	lake trout	muscle	535	1597	1.16	-	-	Lockhart, per. com., 2000
Kaminak - 4	1995 or 1996	-	-	lake trout	muscle	540	1533	0.71	-	-	Lockhart, per. com., 2000
Kaminak - 5	1995 or 1996	-	-	lake trout	muscle	570	1767	1.16	-	-	Lockhart, per. com., 2000
Kaminak - 6	1995 or 1996	-	-	lake trout	muscle	640	2942	0.60	-	-	Lockhart, per. com., 2000
Kaminak - 7	1995 or 1996	-	-	lake trout	muscle	720	4046	1.42	-	-	Lockhart, per. com., 2000
Kaminak - 8	1995 or 1996	-	-	lake trout	muscle	700	3940	1.18	-	-	Lockhart, per. com., 2000
Kaminak - 9	1995 or 1996	-	-	lake trout	muscle	570	1697	0.93	-	-	Lockhart, per. com., 2000
Kaminak - 10	1995 or 1996	-	-	lake trout	muscle	580	1988	0.64	-	-	Lockhart, per. com., 2000

Appendix XXIII: Published Datasets
Part 3: Hg in fish from nearby lakes

FIELD No	LAKE NAME	YEAR	LATITUDE	LONGITUDE	SPECIES	ORGAN NAME	FORK LENGTH (mm)	WEIGHT (g)	Hg (ppm)	Hg concentrations			SOURCE
										Mean (ppm)	Range (ppm)	N	
-	SCHULTZ	1976	64°45'	97°30'	lake trout	-	-	-	-	0.55	0.08 - 2.30	7	Sherbin, 1979
-	TULEMALU	1971	62°56'	99°25'	lake trout	-	-	-	-	0.50	0.02 - 1.26	9	Sherbin, 1979
-	QUARTZITE	1971	62°25'	94°35'	lake trout	-	-	-	-	0.43	0.12 - 1.07	5	Sherbin, 1979
-	YATHKYED	1971	62°41'	98°00'	lake trout	-	-	-	-	0.48	0.07 - 0.87	14	Sherbin, 1979
-	KAMINURIAK	1975	63°00'	95°40'	lake trout	-	-	-	-	0.47	0.18 - 0.94	6	Sherbin, 1979
-	KAZAN RIVER	Jan-71	64°04'	95°35'	lake whitefish	-	-	-	-	0.04	-	19	Sherbin, 1979
-	BAKER	Aug-71	64°00'	96°00'	lake trout	-	-	-	-	0.18	-	10	Sherbin, 1979
-	BAKER	Aug-71	64°00'	96°00'	lake whitefish	-	-	-	-	0.08	-	10	Sherbin, 1979
Maguse - 1	MAGUSE	May-95	-	-	lake trout	muscle	570	1802	0.76	-	-	-	Lockhart, per. com., 2000
Maguse - 2	MAGUSE	May-95	-	-	lake trout	muscle	560	1501	0.65	-	-	-	Lockhart, per. com., 2000
Maguse - 3	MAGUSE	May-95	-	-	lake trout	muscle	500	1421	0.31	-	-	-	Lockhart, per. com., 2000
Maguse - 4	MAGUSE	May-95	-	-	lake trout	muscle	580	2099	0.57	-	-	-	Lockhart, per. com., 2000
Maguse - 5	MAGUSE	May-95	-	-	lake trout	muscle	500	1336	0.79	-	-	-	Lockhart, per. com., 2000
Maguse - 6	MAGUSE	May-95	-	-	lake trout	muscle	550	1488	0.66	-	-	-	Lockhart, per. com., 2000
Maguse - 7	MAGUSE	May-95	-	-	lake trout	muscle	520	1389	0.53	-	-	-	Lockhart, per. com., 2000
Maguse - 8	MAGUSE	May-95	-	-	lake trout	muscle	560	1623	0.84	-	-	-	Lockhart, per. com., 2000
Maguse - 9	MAGUSE	May-95	-	-	lake trout	muscle	540	1527	0.99	-	-	-	Lockhart, per. com., 2000
Maguse - 10	MAGUSE	May-95	-	-	lake trout	muscle	635	1834	0.58	-	-	-	Lockhart, per. com., 2000
Maguse - 11	MAGUSE	May-95	-	-	lake trout	muscle	510	1284	1.80	-	-	-	Lockhart, per. com., 2000
Maguse - 12	MAGUSE	May-95	-	-	lake trout	muscle	500	1264	0.36	-	-	-	Lockhart, per. com., 2000
Maguse - 13	MAGUSE	May-95	-	-	lake trout	muscle	530	1396	0.64	-	-	-	Lockhart, per. com., 2000